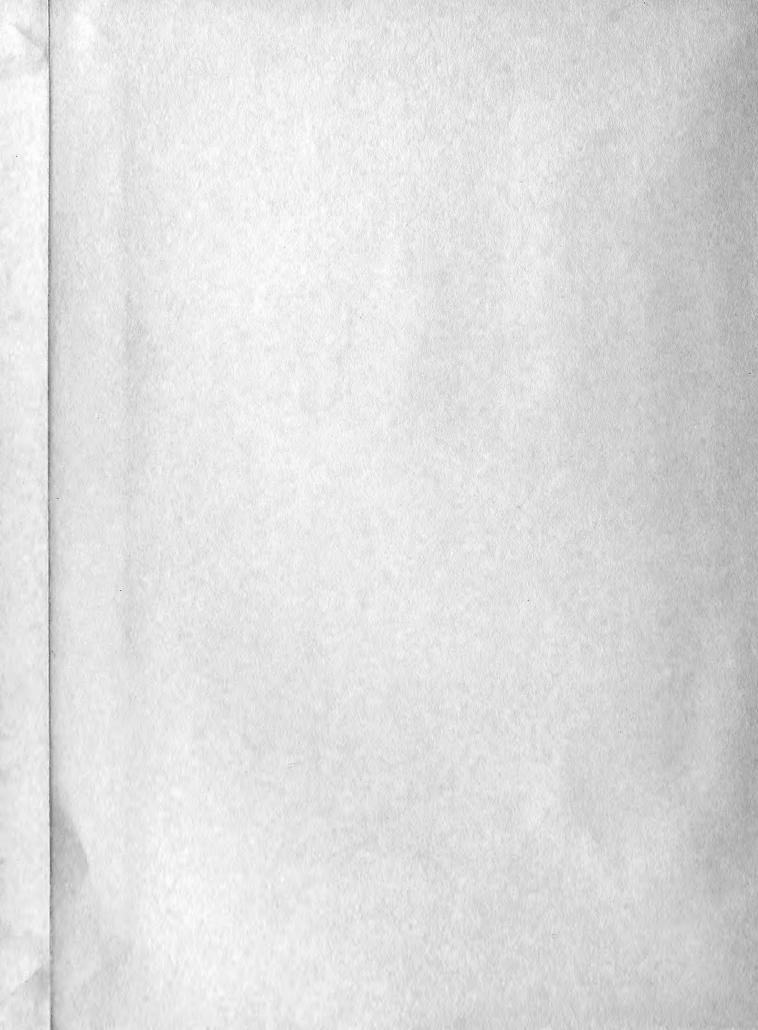
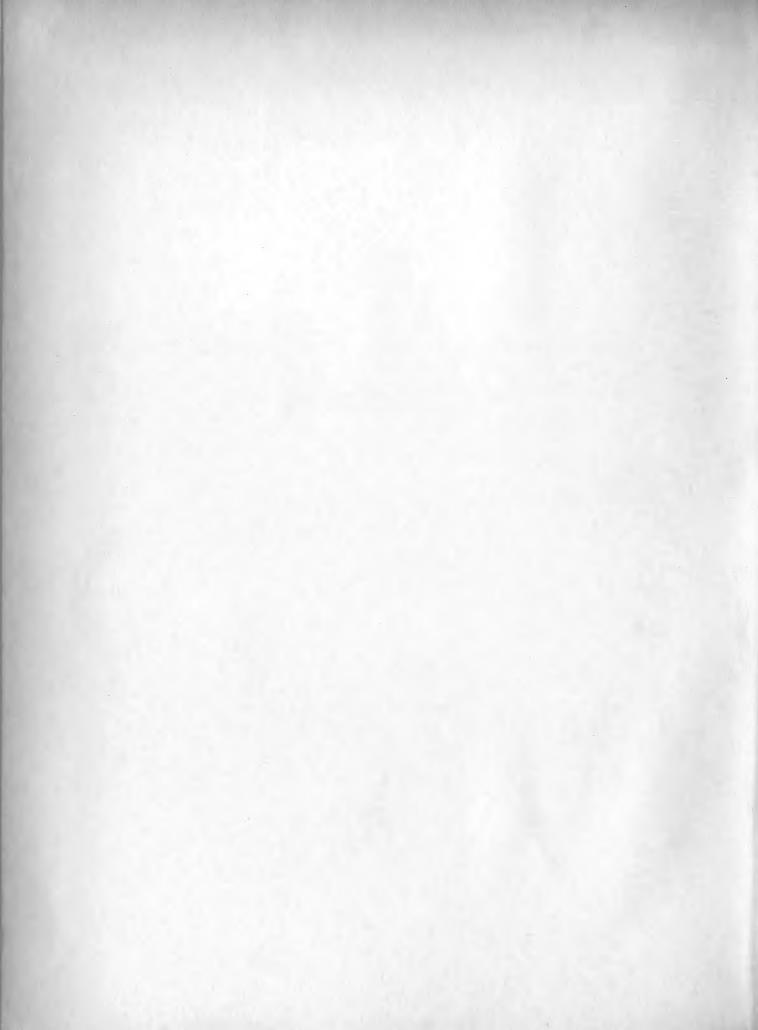
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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS Viale delle Terme di Caracalla, Rome, Italy

CURRENT BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

INDEXES TO SUPPLEMENT 1

prepared by Biology Branch, Fisheries Division

Geographic Index, Suppl. 1
Taxonomic Index, Suppl. 1
Subject Index, Suppl. 1
Citation Index, Suppl. 1

Curr.Bibliogr.aquat.Sci.Fish., 1, Suppl. (Index) Rome 1961
Contains geographic, taxonomic, subject and citation indexes
to references 570001 - 571944

To Suppl.1

	cover page "Containing rences 570001-571994		"Jontaining references 570001-571944"
70026	Thunnus thynnus	should read	*
0027	Chirosoma	should read	
0029	Gnathostenotroides		GNATHOSTENETROIDES
0023	F	should read	
0041	yellow sea	should read	
0062	Candida	should read	Candida
0078	delete the entry		
0092	substitute the entry		
	Comparative	(1957) nysiol., 19:329 physiology: Lation in aquat	osmotic and
	Deals with	terature up to all taxonomic comparison of forms.	groups, with
	FiB:sjh		MF
0106	polychaeta	should read	Polychaeta
0110	coelenterata	should read	Coelenterata
0139	V.stromia	should read	B.stromia
0250	delete the last sente "Something like this report generally foll	perhaps for mo	del; the
0257	Paudalus	should read	Pandalus
0472	gewässer	should read	Gewässer
11	bedingungen	should read	Bedingungen
0484	Nebula	should read	nebula
0529	gulf of Mexico	should read	Gulf of Mexico
0530	Parundinella	should read	PARUNDINELLA
0567	J.H. Mundi in the		

5th sentence of

the annotation should read J.H. Mundie

l Suppl:Erl

57 0568	Crystallolithus	should	read	CRYSTALLOLITHUS
0625	Author	should	read	"Union of South Africa. Government
0713)				
0743				
0764)				
1067				
1114)				
1150				
1164)				
1264				
1290)				
1422				
1433)	Reference	should	read	"Faper presented at the 38th annual meeting, American
1465				Geophysical Union, Washington,
1511)				D.C., April 29-May 2 1957"
1570				
1646)				
1684				
1760)				
1779				
1843)				
0739	Acanthaires	should	read	acanthaires
0300	Therogra	should	read	Theragra
0813	Tricoptera	should	read	Trichoptera
0814	mitteilung	should	read	Mitteilung
0814	wassergehaltes	should	read	Wassergehaltes
0814	schollen	should	read	Schollen
0814	klieschen	should	read	Klieschen
0856	Luminescence	should	read	luminescence

57085 8	Murmanskaya biologiche	skaya	
	stantsiya	should read	Aurmanskaia bio logicheskaia stantsiia
0900	wassers	should read	Wassers
0957	Cpistorchis	should read	upisthorchis
0957	(in freshwater fish: Cyclops and		
	Diaptomus)	should read	(in freshwater copepods: Cyclops and Diaptomus)
1040	Author	should read	Macan, T.T. and J.C. Mackereth
1060	Tubellaria	should read	Turbellaria
1162	Boregadus saida	should read	Boreogadus saida
1172	tube-warm	should read	tabe-mora
1195	Reference	Saet Ilhoda	<u>lydrobiologia</u> , 9(4):348-60
5711224		should road	571224
1274	fih	should read	fish
1386	insert the cmittod reference:		Limnol.Oceanogr., 2(3):281-6
1441	Sasktchewan	siculd road	Saskatchevan
1641	Synopsis	should read	Jynops es
1718	Langudock	haor bluc la	Languedock
1737	fund	chould read	Tund
1751	Scaphipus	should read	icaphiopus
1796	percidae	should read	Percidas
1812	delete the entry		
1834	Iwashi	should read	ieslii
1843	Jassopeia	should read	Jasiones





Geographic Index, Supplement 1 for references 570001 to 571944

100	AFRICA 0412	0882	1814	155 156	Transvaal Madagascar	0405	0292 19 02
110	Africa, N.W. 0246	0538	0840				
	1022			200	NORTH AMERICA	1104	1142
111	Tunisia	0174	1279				
112	Algieria 0415 0432	to	0435	210	Canada 0140		0248
	0462 0738	1157	1704		0249 0250		0395
	1705				0426 0758		0796
113	Morocco 0561	1068	1069		0798 0995		1115
121	Libya		1267		1246 137		1456
122	UAR, Southern Region				1472 1478	_	1504
	(Egypt)	0287	1594		1682 1720	1777	1863
123	Sudan		1594	211	Canadian Arctic	1369	1680
130	Africa, E.Central	0347	0552		Canada, N.W. Ter	ritorie	S
	1028 1029	1045	1496		0 790 0893	•	1441
132	Uganda 0346	0639	1656	212	British Columbia	0009	0142
133	Tanganyika 0558	0726	0831		0233 0245	0637	0757
	6 8 32				0983 1007	1119	1167
134	Zanzibar and Pemba		1593		1198 1261	1268	1330
140	Africa, W. Central	0552	1045		1503 15 84	1585	1644
	1867 1893				1719 1744	Ļ	`
141	Republic of the Ivo	ry		213	Alberta 0325	0362	0649
	Coast 0406	0964	1917		Saskatchewan		1441
	Islamic Republic or			215	Quebec 015	1728	1729
	Mauritan ia		0406		1730		
	Republic of Niger		0371	216	Labrador 0147	0148	0614
	Republic of Senegal	0445	0446		1531 1608	1760	
	0512 0644	0767	0836		Newfoundland	0414	0518
	1089				0790 0970	0985	1608
144	Sierra Leone 0979	1118	1756		1613 1628	3	
	Chana		0215		St.Pierre and Mi	quelon	1608
145	Br. Cameroons		0082	217	New Brunswick	0541	0602
146	Republic of Congo	0596	1869		1608 1862	2	
147	Federal Republic of				Nova Scotia 0156	0157	0541
	the Congo	0410	1363		0616 0969	0985	1094
150	Africa, S. 0559	1496	1499		1096 1608	1626	
	1869				Prince Edward I.	0541	0969
151	Angola 0370 1233	1405	1476		1472 1501	-	
152	S.W. Africa		0841	220	Alaska 0635		1162
154	Union of S. Africa	0205	0234		1396 1881		
	0388 0409		0681	222	Aleutian Is.	0136	0735
	1041 1058			798	- 3470 3606	-	
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223	Pribilof Is	3 .			1472	235	Mississippi	0032	0033	0034
230	USA	0031	0149	0150	0222		0065	0653	0656	0704
		0235	0261	0390	0497		0731	1221		
		0653	0660	0765	0783		New Mexico	0763	0924	1356
		-								_
		0785	0788	0790	0796		Oklahoma	0189	0448	1340
		0822	0830	0842	0845		Tennessee			1432
		0846	0998	1036	1053		Texas 0032	0033	0034	0065
		1070	1091	1108	1137		0418	0536	0653	0762
		1138	1176	1182	1218		0763	1221	1324	1325
		1243	1256	1257	1258		1340	1356		
		1317	1318	1326	1327	236	New England		1114	1381
		1372	1435	1443	1564		Connecticut		0224	1454
		1606	1645	1673	1674		New Hampshir	•		1183
		1675	1676	1677	1678		Maine 0065	0339	0447	1047
		1679	1681	1682	1798		1522	0339	044 [104 !
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		1804	1805	1923	1932		Massachusett		0837	1364
	District of			0065	0324		1365	1439	1639	1693
231	Idaho	0120	0455	0456	0824		1809			
		1093					Rhode I.			1545
	Oregon	0229	0728	1167	1217	237	Delaware	05 85	0855	1580
		1935					Maryland		1056	1083
	Washington	State	0015	0637	0728		New Jersey		0320	0620
		1242	1321	1323	1417		New York	0197	0224	0349
		1611	1644				0691	0850	1018	1145
232	California	0011	0083	0118	0119		1146	1245	1316	1866
- 3-		0239	0240	0241	0242		Pennsylvania		1878	1918
		0333	0618	0667	0728		1919		1010	1/10
		0766	0823	0884	0885		Virginia	0037	0038	0509
			1106	1167	1188		_		_	
		1090					0658	0694	1095	1724
		1197	1328	1351	1401	0.00	1775			0.00
		1402	1520	1614	1786	238	S.Atlantic S			0186
		1787	1855	1922			N.Carolina	0032	0033	0034
	Utah			1093	1686		0065	0330	1039	
233	Colorado				1248		S.Carolina	0032	0033	0034
	Montana				0331		Georgia		0756	1175
	Wyoming				0332		Florida	0013	0032	0033
234	Iowa			0254	0636		0034	0065	0421	0533
	Kansas			1292	1424		0534	0653	0702	0775
	Michigan		0086	0160	1754		1208	1214	1221	1353
	Minnesota		0509	0636	1123		1355	1548	1551	1739
	Missouri		0509	0636	1084		1808	1)40	± / / / ±	1137
	Ohio			0243	0888	240	Bermudas			7565
			0006					0007	7705	1565
0.35	Wisconsin		0296	0636	0960	250	Greenland	0927	1105	1315
235	USA, S.	0000	0022	0024	0990		1514			
	Alabama	0032	0033	0034	0065					
		0653	0731	1221	4 -	300	LATIN AMERIC	A		
	Louisiana	0032	0033	0034	0065					
		0389	0653	1027	1221	310	Mainland Cer		merica	0408
		1247	1521	1734	1745		1104	1559	1931	
		1901	1933			315	Panama			0286

317	Honduras				1168	432	Thailand	0419	0783	1620
320	Caribbean	Ta.			1230	24 ع	1621	0417	0102	1020
321	Bahamas	0033	0164	0259	0421	A 3 5	Malaya		0785	7444
عدر	Danamas			0239	0421	433	•		0783	1444
	Des Consillà	1244	1520	0540	3 4 3 5	434	Indonesia	/37 N3	0783	1690
	Br.Caribbe		ration	0549	1415	435	New Guinea	(Heth.	1	0956
		1843				436	N. Borneo			0786
322	Cuba		0057	-487	1548	437	Philippines		0783	1255
325	Puerto Rice		07 89	1062	1144	438	Cambodia			0783
		1346					manyan Burana yang		03მ 3	0783
	Virgin Is.	(U.S.)			0549	441	Chinese Peo	ple's		
326	Guadeloupe				1148		Republic		0291	0759
327	Neth.W.Ind:	ies		1846	1847		Manchuria			0482
331	Colombia				0474	444	Korea			0783
332	Venezuela		0402	1092	1241	451	Japan 0058	0059	0060	0136
340	S.America,	a.	0630	1110	1438		0348	0659	0729	0730
324	Peru	0128	0399	1691	1849		0746	0748	to	0753
343	Chile	0399	0400	1055	1849		0776	0777	0780	0782
350	S.America,		04-00	10))	1110		0783	0796	0802	0803
351	Brazil	0403	0404	1101	1898		0804	0809	0816	0848
3)1	DIGNIT		0404	TTOT	1090		0849	0873	0874	0875
252	8	1939			007.9		0880			-
353	Argentina			0252	0918			0907	1111	1130
354	Falkland Is	30		0353	1088		1165	1191	1192	1193
							1204	1205	1206	1110
400	ASIA			0584	0784		1211	1212	1215	1232
							1391	1392	1393	1394
410	Asia, S.W.				0516		1590	1502	1603	1604
413	Israel	0108	0307	0490	0510		1638	1683	1742	1752
		0511	0913	0914	0993		1799	1818	1823	1524
		1200	1201	1236	1300		1825	1 834	1839	1356
		1406	1455	1540	1591		Japan, Hokk	aido	0800	0801
		1592	1636	1746	1773		0889	0890	. 0903	0904
		1774	1778	1828	1829		0912	1408	1409	1561
		1830					1841	1842		
416	Iraq				1319		Japan, Hons		0916	0917
417	Iran			0928	1749		1651			,
421	Pakistan			- ,	0783		Japan, Shik	oku	0854	0925
423	India	0123	0124	0125	0265			1463		1571
443	TIME	0277	0572	0783	0864		1572	-	1653	1819
			-			450	-	1052	1093	
		0870	0933	0934	0935	453	Formosa			1937
		0949	0950	0951	1102	~~~	1.4.4.3 C = 2.2		7.07.2	7 200
		1124	1235	1240	1265	500	HUROPE		1218	1377
		1287	1311	1312	1313					
		1407	1480	1711	1712	511	Denmark	0152	0373	0374
		1795					0790	1708	1709	1925
424	Ceylon				0783	512	Faroe Is.		1577	1589
430	Asia, S.E.				0784	513	Iceland	0790	0927	1897
431	Burma				0783					

514	Norway	0085	0152	0191	0258	533	ingland	(cont	d.)	1509	1518
		0621	0640	0693	0790			1527	1596	1597	1662
		0838	0862	0391	0911			1668	1669	1758	1759
		1076	1547	1558	1599			1776	1832	1874	1938
		1767	1791	1870	///		Wales	_,,,			0275
515	Svalbard	-101	-,,,	0146	1737	534	Scotla	and	0121	0247	0466
516	Sweden	0256	0350	0505	0506	754	2000	0736	0770	1105	1155
710	01104011	0740	0774	1051	1079			1442	1701	1748	
		1133	1203	1297	15 62	535	North			1140	0152
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517	Finland	0843	3847	∍937 - 50		541	1 OL M		0251	0358	0411
		1011	1012	1230	1239			0790	1202	1251	1277
		1383	1384	1385	1389	- : 0		1278	1379	0.000	0.77.0
		1397	1475	1482	1483	542	Spain		0519	0711	0712
		1687	1688		. 6			0790	0959	1025	1061
521	Netherlands		0152	0595	0783			1063	1064	1065	1134
		1178	1179	1913				1271	1395	1399	1447
522	Belgium			(152	1857			1560			
524	France	0063	0066	0112	0138	543	Italy	0178	0179	0221	0379
		0139	0180	0182	0211			0502	1000	1052	1224
		0274	0282	0327	0328			1536			
		0495	0545	0652	0760		Sardin	nia		0064	0647
		0783	0794	0952	0992		Sicily	7			0178
		1075	1078	1250	1273	550	Burope	o, S.E	•		1037
		1274	1298	1436	1581	551	Yugos!	lavia	1163	1296	1740
		1610	1622	1649	1713	553	Greece	9			0295
		1722	1725	1726	1616	555	Rouman	nian P	coples	Repub	lic
525	Monaco	0941	0942	1143	1251			0080	0232	0253	0480
		1390						1050	1187	1539	
530	British Isl		0152	0158	0623	556	Turkey	-	0005	0050	0052
		0709	1171	-	1302			0055		0268	_
		1479	1485						1231		
		1940	-1-7	~ > 1 1				1647			
531	Ireland	0420	0628	1635	1650		Anatol				1689
73-		1769	1770	1771	1772	560			entral		1037
532	United King		0061	0184	0199	561	German		012 02 002	1430	1630
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		0790	0967	0997	1194			nany	0152		0790
		1220	1310	1343	1486		GGI	-		1002	1003
		1506	1577	1589	1670				1034		
				1009	1010				1034	1305	1421
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533	England	0014	0187	0188	0313	562	Switze			0=03	0811
		0314	0338	0396	0494	563			0470	0593	1474
		0571	0617	0771	0902	570			entral		1037
		1017	1040	1041	1071	571	German		cratic		
		1128	1249	1288	1342				0228		
		1370	1371	1460	1508			1418	1420	1426	1428

572	Poland		0569	0812	1 848	710	Russian FSSR	0136	0598
573	Czechoslova	kia	0464	0487	0868		0858 0937	0944	1049
		0869	0962	1126	1573		1132 1270	1275	1850
574	Hungary		1126	1195	1615	731	Estonian SSR		1467
					_	751	Ukrainian SSR	0807	1262
600	OCEANIA			0982	1380		1507		
				7,0-			-501		
610	Australia	0068	0145	0289	0542	800	SPECIAL INTERCON	PINENTA	T.
		0783	0926	1074	1153		REGIONAL GROUP		
		1154	1337	1624	1780				
		1781	1860	1905	1916	812	Southern Hemispho	are.	0288
		1930	1942	1,0,	1/10	817	Tropics		0724
611	Northern Te	-		1380	1811	820	Antarctic Contine	am t	
612	Western Aus		-			020	1004 1661	3116	0945
012	western Aus		-	1360	1525	065			0650
(3.3	~	1526	1625	1943	0.540	863	Fr.Community		0650
613	S. Australi		0341	0359	0360				
		0976	1046	1359	1360	A	Atlantic Ocean	0203	0204
		1525	1526				0580 0670	0725	0732
614	Victoria				1625		0910 0969	1096	1423
615	New S. Wale		0360	0542	0961				
		1299				AN	Atlantic, N.	0427	0713
616	Queensland	0542	0696	1074	1152		0790 0791	1059	1341
		1299	1445	186 8	18 9 9		1379 1489	1517	1612
		1908	1909	1928			1663 1664	1665	1810
617	Tasmania			1380	1625	WILA	Atlantic, N.W.	0224	0238
618	Macquarie I	٥			1380		0395 0591	0790	0986
	Norfolk I.				1380		1354 1513	1514	1576
620	New Guinea	Trust	Territ	orv	0304	ANW.OI	l Baffin B.		1448
622	Bismarck Ar			0	1380		2 Davis Strait	1448	1517
623	Bougainville	_	-0 *		1380		Hudson B.	1448	1517
443	Solomon Is.		.)	0853	1380	_	G. of St. Lawrence		0393
624	Papua	(2200001	• /	1380	1887	111111111111111111111111111111111111111	0394 0509	0972	†o
630	New Zealand	0000	0209	0273	0575		0975 0985	1136	
030	New Zealand		_	0833			· · · · · · · · · · · · · · · · · · ·		1366
		0772	0773		0901	THEFT AS	1448 1517	1532	1627
		1005	1031	1184	1305	_	G.of Maine	0060	1416
(20	0 - 1 - 7	1821			3006	AN # . UC	Chesapeake B.	0260	0280
632	Cook Is.				1286	A DISTRICT	0281 1085	1427	
641	Fr. Oceania				0067	ANE	Atlantic, N.E.	0030	0127
660	Hawaii	0162	0906	1336	1934		0927 1320	1354	
673	Caroline Is.				1820	ANE.02	Parents Sea	0088	0133
674	Marshall Is	0		0391	0425		0810 1125	1870	
						ANE.04	North Sea 0113	0121	0218
700	USSR	0003	0091	0482	0790		0326 0367	0369	0588
		0805	0817	0908	0919		0814 0821	1033	1054
		0923	0936	0939	1008		1301 1320	1431	1537
		1032	1120	1158	1169		1629 1700	1791	1879
\$		1189	1190	1253	1269	ANE.05	Baltic Sea 0018	0019	0194
,		1276	1331	1347	1467		0588 0844	1033	1238
		1468	1469	1553	1557		1879		
		1631	1685	1844	1865	ANE.06	G.of Bothnia	1238	1481
		1892	1927	. ,				Suppl	
			<i>y</i> – 1				_		

ANE.07	Goof Finland			1238	ISW.Ol	Red Sea	0511	1609
ANE.08	English Channel	0030	0044	0366	ISW.03	Persian G.	0754	1609
	1903				ISW.05	Arabian Sea 081	8 0870	1609
ANE.09	Irish Sea		0507	1519	ISE.06	B. of Bengal 007	8 0572	1160
AS	Atlantic, S.			0033	ISEW	Indopacific, Ce	ntral	0028
ASW	Atlantic, S. 7.	0214	0222	0284		0162 016	3 0867	0879
	0285					0909 121	6 1361	
ASW.01	G. of Mexico	0198	0222	0283		1655		
	0401	0421	0453	0529	ISEW.02	S.China Sea	0291	0999
	0530	0531	1528	1529		E.China Sea	/-	0565
	1880		-) - 0	-)-)	•	Yollow Sea		0041
45W.02	Caribbean Sea	0185	1272	1936	_	Inland Sea of J	anan	1836
	Atlantic, S.E.		7515	0952	20211000	1850	copema.	1000
	Bay of Biscay	0044	0703	1098	TOWN 18	Coral Sea 135	8 1261	1822
	Mediterranean S				ISE			
ASD, UZ			0051	0178	TOE	Pacific, S.E.	0301	0741
	0179	0279	0415	0510		0861 088	6 1167	
	0538	0769	1100		T D	7107 470 470 400	0.00.4	7.600
ASE, O5	Mediterranean S	-		0039	P	POLAR SEAS	0084	1680
		0431	0622	0768				
	1180				PN	Arctic Ocean	0202	0343
	Sea of Marmara		1616	1864		0348 039		0744
ASE.10	Black Sea	0021	4	002/		1161 116	2 1423	1431
	0069	0438	0648	0778		1896		
	1016	1398	1633	1706	PN.Ol	M.Polar Basin	0514	0515
	1864					1382		
ASE.11	Sea of Azov	0377	0859	0866	PS	Southern Ocean	0074	0299
	1334	1470	1723			0359 045	0 0710	0744
						୦ଌ 3 9 ୦ 94	5 1109	
I	INDOPACIFIC OUE	AN	0376	0391	PSEW	S. Polar Seas	0095	0131
	0416	0460	0604	0570		0166 045	0 0451	1004
	0683	0688	0783	0856				
	0897	1087	1226	1228	L	INLAND SEAS AND	INTERTE	RRITORIAL
	1266	-	1352			LAKE SYSTEMS		
	1466	1926						
III	Pacific, N.	0020	0106	0132	L.13	D.African Lakes	0528	0553
	0233	0244	0637	0718		0576 057		
	0737	0796	1009	1131		0638 067		
	1167		1587	1588		1060 144		
	1607		1910	1,000		1656 171		1802
IN.Ol	Japan Sea	1(0)	1080	1081	L.21	American Great		
	_				TOCI			0217
IN.02	Sea of Okhotsk	0170	1131	1387		0363 048	9 0092	1505
III.03	Bering Sea		0735	0779	T 33	1914		00#0
Ta	0871		0540	2655		L. liticaca	A B 400 M	0878
IS	Tropical Indopa			1655	T10 (5	Caspian Sea		0923
ISW	Indian Ocean		0077	0205		0928 093	9 1710	
	1121		1412	1494				
	1495	1497	1609	1655				

<u>Ibvonomic Index, Supplement 1</u> for references 570001 to 571944

1,00 FISHES. GEN.	0039	0040	0047	1,11	Torpedo			1300
0051 0073	0056 0092	0057 0094	007.2 0095	1,12	Hydrolagus			0637
0114	0150	0196	0197					
0207 03 1 2	0208 031 8	0214 0364	0220 0383	1,17	-	0377 1852	0928	1197
0385	0392	0401	0402		ACIPENSERIDAE		1120	1373
0435	0444	0461	0487		Huso			0928
0543	0561	0567	0612	4 04	A 7 3 - 7			0400
0647 0687	0654 0698	0676 0741	0684 087 7	سل تم و ساد	Alepocephalus Alosa			0432 1728
0886	0904	0912	0913		Caspialosa			1706
0919	0924	0948	0981		Cetengraulis			0028
0982	0983	0992	1030		Clupea harengus	1	0030	0121
1063	1064	1080	1081		0127	015 3	0169	018 3
1137	1153	1207	1237			0218	0248	0326
1248	1251	1262	1302			039 3	0394	0395
1310	1325	1341	1353			0595	0669	0732
1454	1535	1536	1566			0986	1270	1481
1690 1740	1727 1750	1733 _. 1780	1736 1817			150 6 1628	1532 1668	1626 1670
1827	1836	1882	1017			1862	1873	1874
1027	1000	2002			Clupea pallasii	1002	0756	0937
1,02 Lampetra			1845			1824	1825	
Petromyzon		0042	089 3		Clupea sprattus 1017		0021	0381
1,03 Myxine			0430		Engraulis encra 1398	sicho.	lus	0025
1,07 Carcharodon Cetorhinus			1416 1806		Engraulis japon	ica 1834	0058	0059
Isurus			1498		Engraulis morda			1855
Rhincodon		1324	1528		Engraulis ringe			1401
					Ethmalosa			1757
1,08 Galeorhinus			1167		Etrumeus			0058
Hypoprion	1007	7.00.4	1529		Hilsa			1265
Mustelus	1391	1394	1499		Jenkinsia Vasalana			1528 135 5
Scoliodon Scyliorhinus		0101	03 <i>57</i> 030 3		Megalops Opisthonema			1528
Scylliogaleus		0101	1499			0035	0036	0181
						0366	0433	0434
1,09 Etmopterus		0575	0809			0712	0959	1163
Euprotomicrus			1226		1190	1404		
Oxynotus			0101		Sardinella -		0433	1528
SQUALIFORMES			0129		Sardinops melan	ostic	ta	0058
Squalus 0637	0737	1375	1391		1833		0224	0200
1890 Squatina			0102		Sardinops ocello 0388	a ta 1058	0234 1177	0387
1,10 Dasyatis			1394	1,22	Channa			1212
Myliobatis			0102		Chanos			1593
Neotrigonia Pada		7010	1942 1750	7 99	Angenting		0101	0918
Raja Rhinobatos		1017	1159 0101	1,53	Argentina Coregonus	0232	0362	0649
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1,23	Cristivo	ner	0142	Q217	0362	1,28	Arapaima.			17.70
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	Leucicht.	hys			1505 1162	1,29	Anotopterus			1765
	Oncorhyn	chus.	gen.	0020	0688	1.32	Bathypterois			0432
		1352	1586	1587	1588	_,	Chlorophthalmu	S		0101
	Oncorhyn	chus g	orbusc	ha.	0306		Harpadon			1860
		0317	0758	1682			Myctophum			0591
	Oncorhyn			07:58	1130	1 00	C			1200
	Oncorhyn	enus K -0758	isuten 1119	1321	001 <i>5</i> 1323	1,30	Gnathonemus			1583
	Oncorhyn			0009	0143		Gymnarčhus			1583
	one en rigin	0227	1321	1330	1632	1.38	Alestes			0371
		1682	1719	1935		_,	Anoptichthys			0826
	Oncorhyni	chus t	schawy	tscha	0317		Astyanax			0826
		0333	0471	0667	0668					
		1026	1106	1119	1351.	1,40	Abramis		0805	0928
	On aanhim	1502	**	0133	0482		Acanthobrama		07 30	1830
	Oncorhyn.	1132	1804	1854	040%		Acheilognathus Algansea		0729	0730 0027
	Osmerus	110~	2001	0600	1918		Aristichthys			0782
	Plecoglo.	ssus			0957		Barbus 0869	1411	1539	1540
	Salmo clo	ırkii	0144	0332	1720		1830			
	Salmo ga			0007	0042		Blicca			0454
		0141	0144	0270	0271		Brachydanio			0785
		0331 0751	0667 0899	0692 0990	0750 118 3		Campostoma			0704 1049
		1188	1210	1243	1352		Capoetobrama Carassius	0027	0278	0493
		1502	1503	1606	1607		0916	0917	1211	1212
		1720	1876	1877	1925		1293	1391	1411	1763
	Salmo sa.	Ia r	0019	0147	01 <i>4</i> 8		Catostomus			1606
		0180	0255	0258	0517		Chalcalburnus			0928
		0844	1059	1105	1297		Chrosomus		1441	1919
		1501 1730	157 4 1770	1635 1771	1650 1858		Cobitis Ctenopharyngod	on		0908 0782
	Salmo tri		0086	0120	0247		Cyprinella	216		0590
		0642	0689	0844	1188		Cyprinus	0027	0170	0171
		1297	1383	1384	1385		0253	0578	0745	0752
		1428	1442	1477	1574		0780	080 3	0807	0876
	Salmo sp		0027	0593	1212		<i>09,23</i>	0928	0936	0987
	CATHONE	1256	1257	1328	0016		1002	1108	1145	1146
	SALMONIDA	1478	0601 1504	0845 1510	0846 1645		1165 1418	1212 1420	1391 1432	139 3 1591
		1817	1932	1010	7040		1602	1606	1829	1839
	Salvelin				061 3		CYPRINIDAE	2000	0003	0716
	Salvelin	_		3	0217		Danio		0277	1473
		0629	<i>1133</i>	1258	1445		Erimyzon			1918
		1500	1501	1876	1000		Evarra			00.27
	Salvelin	_		0027	1772		Hybognathus			1441
	Spirinchu				082 3 0181		Hyborhynchus Hypophthalmich	thuo		1891 0782
	Thymallu:	,			0.101		Leuciscus	11093	1411	1539
1,24	Dallia				1162		Minytrema		4. 14	1913
	ESOCIDAE				0715		Misgurnus			121.3
	Esox	0018	0116	0715	0868		Mo.costoma			1356
		1003	100.1	11.55	1769		Nocomis			19.19

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1,40	Notemigonus			19.18	1,48	Theragra			0800
	Notropis	00.27	0192	0590					
	1918	1919			1,50	Eucalia			1919
	Pantosteus			1441		Gasterosteus	0181	0757	1411
	Pfrille			1441					
	Pimephales	.1763	1391	1919	1.51	H i ppocampus		0100	1416
	Ptychocheilus			0824		Nerophis			0100
	Rhinichthys			1919		Syngnathus			0102
	Rhodeus			1411		13 gruyraa ortaa			02.044
	Rutilus	0308	0928	1126	1 51	Lophotus			77710
	Semotilus	03 03	しかたら		€ ن و شد	пориосия			1749
			7740	0704	4 ~~	07 7 4			
	Varicorhinus		1540	1830	1,57	Chologaster	_		1762
	Vimba			0928		CYPRINODONTIDA	$\mathbb{L}E$		1364
						${\it Gambusia}$			0762
I,41	Ameiurus			0682		Leb i st es			<i>1530</i>
	Clarias		0828	1830		POECILIIDAE			000 3
	Ictalurus	0302	0682	108 4		Xi phophorus		0062	1693
	1606								
	Noturus			1919	1.61	Caristius			1765
	Parasilurus		1211	1212	, –				2.00
	Plotosus			1212	1 62	Capros			0101
	SILURIDAE			0003	2,02	capi oo			0101
	Wallagonia			0863	1 65	1 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			0000
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7 12				7740		Aldrichetta		1624	1625
1,46	ANGUILLIFORMES			<i>1143</i>		Chirostoma			0027
						Mugil 0022	0032	0033	0485
1,43	Anguilla angui		0256	1033		0 4 86	-	<i>1340</i>	1407
	1079	1303				1416	1868		
	Anguilla japon	i ca	0753	140 3					
	Anguilla sp.	0558	0559	0602	1,67	Ophicephalus			1411
	Anguilla sp. 0841	<i>0558</i> <i>1155</i>	0559 1212	0602	1,67	Ophicephalus			1411
				0602 0102					1411 1782
	0841 Echelus					Algoa			
	0841			0102		Algoa Austrosparus			1782 1868
1.44	0841 Echelus Ophicthys			0102 0431		Algoa Austrosparus Bolesoma			1782 1868 1919
1,44	0841 Echelus			0102		Algoa Austrosparus Bolesoma Brama			1782 1868 1919 1268
	0841 Echelus Ophicthys Nemichthys			0102 0431 0432		Algoa Austrosparus Bolesoma Brama Caranx			1782 1868 1919 1268 1129
	O841 Echelus Ophicthys Nemichthys Cololabis			0102 0431 0432 1561		Algoa Austrosparus Bolesoma Brama Caranx CICHLIDAE		7907	1782 1868 1919 1268 1129 1640
	O841 Echelus Ophicthys Nemichthys Cololabis Cypsilurus			0102 0431 0432 1561 0048		Algoa Austrosparus Bolesoma Brama Caranx CICHLIDAE Chrysophrys		1391	1782 1868 1919 1268 1129 1640 1859
	O841 Echelus Ophicthys Nemichthys Cololabis			0102 0431 0432 1561		Algoa Austrosparus Bolesoma Brama Caranx CICHLIDAE Chrysophrys Coris		1391 0101	1782 1868 1919 1268 1129 1640 1859 1496
1,47	O841 Echelus Ophicthys Nemichthys Cololabis Cypsilurus Strongylura			0102 0431 0432 1561 0048 0102		Algoa Austrosparus Bolesoma Brama Caranx CICHLIDAE Chrysophrys Coris Coryphaena			1782 1868 1919 1268 1129 1640 1859 1496 1391
1,47	O841 Echelus Ophicthys Nemichthys Cololabis Cypsilurus Strongylura Boreogadus			0102 0431 0432 1561 0048 0102		Algoa Austrosparus Bolesoma Brama Caranx CICHLIDAE Chrysophrys Coris Coryphaena Ctenolabrus			1782 1868 1919 1268 1129 1640 1859 1496 1391 0504
1,47	O841 Echelus Ophicthys Nemichthys Cololabis Cypsilurus Strongylura Boreogadus Eleginus	1155		0102 0431 0432 1561 0048 0102 1162 0659		Algoa Austrosparus Bolesoma Brama Caranx CICHLIDAE Chrysophrys Coris Coryphaena Ctenolabrus Cymatogaster			1782 1868 1919 1268 1129 1640 1859 1496 1391 0504 0757
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1,47	Techelus Ophicthys Nemichthys Cololabis Cypsilurus Strongylura Boreogadus Eleginus Gadus macroceph Gadus merlangus 1194 1709 Gadus morhua 1275 1666 Gadus poutassou Gadus sp. Lota Melanogrammus Merluccius meri 1668	1155 1155 1666 0413 1379 1668 1	0420 1668 0518 1532 1870 0504	0102 0431 0432 1561 0048 0102 1162 0659 0637 0605 1708 1094 1563 1890 0705 0605 0374 1890 1666		Algoa Austrosparus Bolesoma Brama Caranx CICHLIDAE Chrysophrys Coris Coryphaena Ctenolabrus Cymatogaster Dascillus Decapterus 1655 Dicentrarchus Etheostoma Gomphosus Haplochromis Ichthyscopus Julis LABRIDAE Lateolabrax Lepomis 0026 1176	0761	0101 1391 0763	1782 1868 1919 1268 1129 1640 1859 1496 1391 0504 0757 0574 1528 0100 1796 1555 0638 0696 1496 1497 1602 1146
1,47	O841 Echelus Ophicthys Nemichthys Cololabis Cypsilurus Strongylura Boreogadus Eleginus Gadus macroceph Gadus merlangus 1194 1709 Gadus morhua 1275 1666 Gadus poutassou Gadus sp. Lota Melanogrammus Merluccius meri 1668 Pollachius	1155 1155 1666 0413 1379 1668 4	0420 1668 0518 1532 1870	0102 0431 0432 1561 0048 0102 1162 0659 0637 0605 1708 1094 1563 1890 0705 0605 0374 1890		Algoa Austrosparus Bolesoma Brama Caranx CICHLIDAE Chrysophrys Coris Coryphaena Ctenolabrus Cymatogaster Dascillus Decapterus 1655 Dicentrarchus Etheostoma Gomphosus Haplochromis Ichthyscopus Julis LABRIDAE Lateolabrax Lepomis 0026	0761 0042	0101 1391 0763	1782 1868 1919 1268 1129 1640 1859 1496 1391 0504 0757 0574 1528 0100 1796 1555 0638 0696 1496 1497 1602
1,47	Techelus Ophicthys Nemichthys Cololabis Cypsilurus Strongylura Boreogadus Eleginus Gadus macroceph Gadus merlangus 1194 1709 Gadus morhua 1275 1666 Gadus poutassou Gadus sp. Lota Melanogrammus Merluccius meri 1668	1155 1155 1666 0413 1379 1668 1	0420 1668 0518 1532 1870 0504	0102 0431 0432 1561 0048 0102 1162 0659 0637 0605 1708 1094 1563 1890 0705 0605 0374 1890 1666		Algoa Austrosparus Bolesoma Brama Caranx CICHLIDAE Chrysophrys Coris Coryphaena Ctenolabrus Cymatogaster Dascillus Decapterus 1655 Dicentrarchus Etheostoma Gomphosus Haplochromis Ichthyscopus Julis LABRIDAE Lateolabrax Lepomis 0026 1176	0761 0042	0101 1391 0763 0389 0928	1782 1868 1919 1268 1129 1640 1859 1496 1391 0504 0757 0574 1528 0100 1796 1555 0638 0696 1496 1497 1602 1146

1,70	Lut janus			1880	1,75	Rastrelliger	0077	1313
	Micropogon			0694		Sarda 0024	0052	1416
	Micropterus	0027	0097	0682		Scomber scombrus	0023	1903
	0884	0385	1146			Scomber sp.	1391	1393
*	Naucrates			1416		Scomberomorus comme		1154
	Niphon			1212		Scomberomorus queen		
	Opistognathus			0164		200,000,000,000,000,000,000,000,000,000	0.20070000	1154
	Oplegnathus			0907		Scomberomorus sp.		1154
	Pagellus		1300	1616			7.000	
			1300			Xiphias 1055	1072	1739
	Pagrosomus			0780	4 80	4		2504
	Paratilapia			1902	1,76	Anabas		0586
	Perca flavesce		0223	1754		Betta		0004
	Perca fluviati	lis	0007	0018		Cubiceps		0432
	1428					Stromateus		0100
	Percina		0761	0763		Tetragonurus		1605
	Plectroplites			1542				
	Pomosci s			1146	1.77	GOBIIDAE		1590
	Pseudopriacant	hus		1416		Gobius	0080	0778
	Ptychochromis			1902		Neogobius		1470
	Roccus 0389	0998	1036	1316		Pomatoschistus		0080
	1803	0550	1000	1010		10/12/03/03/03/03		0000
	Sargus			1300	1.78	Cottus	0635	1509
	Sarpa			0100	2970	Hexagrammos	1211	1212
	SCARIDAE			1797			1611	1212
		7770	7790	1463		Lepidotrigla	7767	1162
	Seriola	1119	1130			Myoxocephalus	1161	
	SERRANIDAE			0370		Ophiodon		0637
	Serranus			1692		Pterois		1212
	Sparus			1602		Scorpaenichthys	1057	1246
	Taius			0041		SCORPAENIDAE	1494	1495
	Temnodon			16 4 8		Sebastes 1400	1612	1613
	Tilapia 0173	0274	0287	0371		Sebastodes		0637
	1029	1176	1593	1656				
	1937				1.80	Auxis	1463	1571
	Trachurus	0387	1058	1129		Euthynnus	0964	1943
	1177	1391	1398	1633		Germo 0662 0742		1463
	Upeneus	2002		0622		1513 1654		
	openead			00~~		Katsuwonus 0662		0848
7 777	Assembiaha a		0088	1737		0849 0913		1216
1,11	Anarhichas		0000					
	Lembeichthys			0999		1388 1466		1943
						Neothunnus 0446		0721
1,72	Ammodytes		0801	0890		0722 0853		1216
	Brosmo r phycis			0118		1464 1572		1818
	<i>Hoplobrotula</i>			1212		1819 1820		
						Parathunnus 0879	1121	1152
1,73	Callionymus		016 3	0432		1638		
	Si ganus			0100		THUNNIFORMES 0445	0555	0565
	V					0989 1055	1101	1376
1.74	Acanthurus			0198		1696 1739		1931
_,	Thyrsites		0145	0360		Thunnus thynnus	0026	0648
	TRICHIURIDAE		0220	1368		1076 1144		1354
	Trichiurus			0050		1629 1630		2004
	TI OCITORIUS			0000		Thunnus sp.		1528
7 75	Acanthogyhium			0808		Timinimo op.		10/0
1,/0	Acanthocybium				1 07	DI DIDAN DAME DADURA		7079
	Gymnosarda	0403	0500	1943	1,01	PLEURONECTIFORMES		1013
	Istiophorus	0421	0530	1655	7 00	Donathan		7050
	Makaira 1055	1652	1653	1655	1,82	Psettodes		1859
	1739						1 0	7 . MA
							1 Sup	p1:1'4

1,83 Clidoderma	1765	1.99 FISHES', MISC. (continued)
Gymnachirus	0238	0903 0905 0922 0927
<i>Hippoglossoides</i>	<i>1366</i>	0935 0936 0944 0954
Hippoglossus hippoglossu	3 1366	0960 0982 0989 1001
1890		1007 1018 1021 1025
Hippoglossus stenolepis	1926	1047 1058 1068 1069
Lepidopsetta	1842	1074 1083 1085 1092
Microstomus 011:		1093 1103 1118 1123
Paralichthys	1212	1143 1156 1168 1178
Platichthys	1841	1184 1187 1189 1198
Pleuronectes platesso	0814	1199 1200 1201 1225
1133 1666	007 #	1231 1236 1249 1253
Pleuronectes sp.	0814	1254 1255 1269 1276
The state of the s		
Pseudopleuronectes 017.		
Scophthalmus	1366	1337 1345 1346 1363
Solea 1666		1372 1377 1389 1406
SOLEIDAE 1204 1204	5 1206	1419 1421 1424 1426
7 00 5	2 4	1431 1443 1455 1468
1,87 Remora	1554	1474 1475 1479 1480
		1492 1493 1514 1544
1,89 Monacanthus	0907	1553 1564 1565 1592
		1599 1601 1604 1615
1,92 Sicyases 170	2 1703	1617 1618 1620 1621
		1623 1643 1662 1669
1,95 Raphidiopsis	1312	1673 to 1679 1681
		1686 1689 1690 1697
1,99 FISHES, MISC. 0010 003.	0043	1714 1722 1724 1725
0053 0054 006.	0065	1738 1743 1745 1746
00 68 0 071 0 08 .	1 0082	1775 1778 1795 1800
0091 010 3 010	4 0105	1805 \ 1828 1838 1844
0115 0117 012	0124	1848 1850 1863 1864
0125 0134 015	0174	1866 1875 1878 1879
0193 0212 0213	0221	1881 1883 to 1887
0237 0239 0240	0249	1889 1892 1893 1894
0250 0254 026	3 0264	1898 1900 190 1 1905
0265 026 7 0268	3 0296	1907 1911 1914 1915
0298 0301 0309	0314	<i>1921 1922 1931 1939</i>
0324 0327 0328	3 0329	1940
0335 0341 036.	0365	
0373 Q379 0403	3 0405	2,00 CRUSTACEANS, GEN. 0008 0039
0408 0439 044	0470	0040 0069 0072 0092
0481 0492 050	0502	0095 0146 0214 0215
050 3 0 5 06 05 06	0527	0312 0364 0401 0402
0533 0542 054	5 0550	0435 0461 0483 0487
0556 0 570 0576		0495 0544 0561 0567
0585 0614 0636		0587 0588 0647 0695
0641 0644 065		0741 0886 0904 0912
0660 0663 066		0913 0914 0948 0979
0681 0695 071.		0982 0983 0997 1022
0760 0765 077		1032 1043 1044 1064
0784 0786 079.		1080 1081 1134 1151
0795 079 6 080		1229 1248 1250 1251
0321 0830 034		1262 1302 1310 1325
0854 0858 085		1328 1341 1454 1535
0864 0866 087		1545 1566 1690 1740
3331 333 007		1817
		1 Suppl: 75

2,01 BRANCHIOPODA			1508	2,20				1560
			0.700		MYSIDAE			0610
2,02 Artemia		0306	0592		Mysidops is			0186
Chirocephalus			0759		~			
				2,23	Gnathostenetro	ides		0029
2,05 Bosmina			1314		Idotea			1086
Daphnia 0181	0547	0634	1 <i>451</i>		I.SOPODA		0412	1104
1477	1487				Jaera			0988
CLADOCERA		0677	1292		Limnoria			0566
Moina			0181		Mesidotea			0350
Simocephalus		0748	0749		Storthyngura			0136
2 20 222772214	0015	0470	0 00 0	2 24	177000000000			oma o
2,09 COPEPODA	0245	0412	0 87 3	4,24	Allorchestes		3040	0772
1292					Gammarus		1040	1220
					Hyale			0772
2,10 Acanthocyclops	3		0804		Marinogammarus			1220
Arcatia			0251		Orchestia			0773
Amphiascus			008 3		Pontogamm arus			1334
Boeckella			0833					
${\it Bradyidius}$			0529	2,25	Lysiosqu illa			0074
CALANIDAE		0319	0579		Squilla			0797
Calanopia			0185					
Calanus	0817	1073	1320	2,26	Euphausia			0856
Clausidium			0767		Nycti phanes			0360
Clavella			1202					
Cyclops			0957	2.27	DECAPODA		0415	1531 '
${\it Diaptomus}$		0628	0957					
Euchaeta		0000	0529	2 28	Crangon			0372
Eurytemora			1003	~,~0	Hippolyte			0257
Halicyclops			0804		Leander			1610
Lichomolgus			0623		Lysmata			0257
			0833		_			1102
Metaboeckella					Metapenaeus	7.700	7 1170	
Metridia			1301		NATANTIA	1179	1417	1881
Octopicola			0769		1909	1913	1930	1931
Paracyclops			0804		Palaemonetes	0.600	0200	0201
Parundinella			0530		Pandalus 0257	0637	1128	161 1
Peroderma			0432		Parapenaeus			1102
Pontella			0531		PENAEIDAE			1299
St ephos			0529		Penaeus 0657	0775	1102	1808
${\it Tigriopus}$			1307		1867	1908		
Ti sbe		0083	0768		Sicyonia			1039
					Teredicola			1794
2,12 CIRRIPEDIA			1579					
				2,29	Aegla			0323
2,13 Balanus 0084	0139	0159	0337		Aniculus			1087
0348					ASTACIDAE	1377	1698	1817
Branta			1490		Astacus			0562
Chthamalus			0139		Brachymotus		0538	1172
Elminius	01 3 8	01 3 9	1172		Callianassa			0767
Lepas	0100	0100	1172		Callinectes	0260	0352	1867
Polliceps			0139		Cambarellus	0521	0522	0526
101100000			0200		Cambarus	00~2	00~~	0525
2,17 MALACOSTRACA			0599				0233	0540
~ JII RIBLING OD LITHON			0099		Cancer		0200	OOTO

2,29	Cervimun Emerita	ida			0400 0645	3,09	Eupleura Melongena		0037	0678 0658
	Neptunus			1729	1788 1867		Molpadicola Neptunea		0.459.4	0646 0504
	Orconect Pachygra		0645	1172	12 47 1 34 8		Urosalpinx 1923	0037	0674	0678
	Pagurus Palinuru				1639 1867	3,10	Littorina Pomatiopsis			0159 0457
	Paralith Pinnother		0944	1396	1881 11 74		Potamopyrgus			0770
	Pisa Planes			1716	171 7 1172		Scyllaea			1843
	Portunus Procamba: REPTANTI		0240	0176	1928 0731	3,13	Biomphalaria Bulinus		0346	0346 1815
	Sarmatium Sesarma		0349	0484	06 31 0840 0840	3 14	Limnaea CERIONIDAE			0346 0305
	Uca	0098 1639	0520	0525	1541	ي ي ر	Spartina		0275	0566
2,99	CRUSTACE		ISC.	0011	0031	3,15	PELECYPODA	0607	1233	1234
		0134 0264 0500	0152 0265 0516	0173 0298 0544	0213 0309 0611	3,16	Crassostrea 0658 1230	052 3 0 717 1456	0524 1019 1799	05 41 1095
		0664 1118	0876 1231	1068 1255	1069 1277		Gryphaea 1075	0344 1456	0473 1759	0952
		1278 1479	1279 1480	1345 1620	1458 1621		<i>Hyriopsis</i>			0748
		1738 1886	1857 1892	1863 1893	1869 1898		MYTILIDAE Mytilus 0473	0709	1543	0961 1807
2 00	MOLLUSCS	1900	1901	1905 0039	11 3 9 0040		Ostrea 0038 0920 1111	0300 0921 1 3 99	0473 1019 1456	0717 1095 1460
3,00	MOTTOSCS	0069 0146	0072 0182	0039 0092 0214	0095 0215		1603 Pecten	1359 1758	1759 1667	1807 1929
		0312 0435	0364 0458	0401 0483	0402 0487		Pinctada 1286	0650 1742	0874 1752	0925 1916
		0495 0588	0561 0647	0567 0695	0587 0741		Pinna S e ptifer			0473 1462
		0886 0914 0983	0904 0948 0997	0912 0979 1022	0913 0982 1032	3,17	Cardium Mactra			0519 0661
		1043 1080	1044 1081	1064 1134	1070 1229		Martesia Mya 0426	0447	1056	1240 1522
		1248 1302 1341	1250 1310 1454	1251 1325 1535	1262 1328 1545		Scrobicularia Tapes Teredo		0519	0632 0777 0938
		1690	1740	1814	1817		Venus 0473	1545	1768	1764
	GASTROPO.			0416	1244	3,21	DIBRANCHIA Octopus 0187	0769	0076 1568	1234 1569
3,07	Patella	0045	0181	0994	1477		Ommastrephes		0889	1192

3,22 Neopilina			1835	5,09	Xenopus	}		0266	1695
3,99 MOLLUSCS, MI		0031 0213	01 34 02 64	5,10	Scaphic	риз		1453	1751
026 051	5 0304	0309 0664	0500 0876	5,11	Acris Bufo		0096	0252	0620 1552
089 111		1069 1255	1097 1 277		Crinia Hyla				10 46 0620
1 <i>2</i> 7 1 <i>4</i> 8	0 1566	1458 1 6 20	1479 1621		Phyllob Prosthe	erapis			0459 0459
173 189	2 1893	1863 1898	1886 1900	£ 70	Pseudac		0005	0096	0620
190		1939	07.50	5,12	Rana	0455 1853	0665	1695	1734
4,00 MAMMALS, GEN			0150	5.29	AMPHTRI	TANS, MI	SC.		1175
4,05 Enhydra			1789	0,70	1201 11101	.a.z. (0) 122 (11,0
				5,30	REPTILI		0.450	0150	0235
4,06 Callorhinus Cystophora			1790 1315			0385	0458	1028	
Halichoerus			1136	5,31	Chelydr	a		0155	0339
Phoca 079	3 1136	1315	1789	•	Clemmys			1142	1319
PINNIPEDIA			0625		Dermocl Pseuden			0013	179 <u>1</u> 0021
4,16 Castor			0325		1 3660611	<i>.</i> 663			0022
Ondatra			0325	5,34	Anniell				0618
4,21 CETACEA 006	3 0299	0860	1058		Cosymbo Dasia	otus			0210 0210
138		1425	1448		Gehyra				0210
165					Hemidae	•			0210
4,22 Globicephala		0137	1448		Varanus	3			1811
Mesoplodon		0137	08 3 8	5,35	HYDROP!	HIDAE			1491
Physeter			0699	•	Thamno				1721
Stenella			1528	5 50	BIRDS,	ा सभा			0150
4,23 Balaenoptera	musculu	3	0978	0,00	DETIDE 9	J.T. I.			0100
Balaenoptera 045	physalu		0450	5 ,5 8	Megady	otes •			1338
Megapt er a 029	0209 03 5 9	0288 08 39	0289	5,61	Puffin	រេន			1398
MYSTACOCETI			1215	5,62	PELECAI SULIDAI				03 3 8 1899
4,97 MAMMALS, AQU		0149	0385	F 60	GTGONT:	reacter.			0070
059	3 1088			٥,03	CICONII	LFORMES'			0819
5,00 AMPHIBIANS,	GEN. 3 1028	0150	0385	5,64	Lophody	ites			1777 1777
040	LUEU				Mergus				1111
5,05 Ambystoma	03.55	04	0154	5,79	Corvus				0740
Plethodon 143	0157	0456	0723	5.87	BTRDS.	AQUATIC		0189	0598
Typhlomolge			0609	0,01	J=1000 9	0625 1723	1088	1097	1336
5,07 SALIENTIA			0189			2/20			

5,96 Ascidia Ciona CLAVELINIDAE Phallusia	0087	0623 1224 0926 1224	6,26	Erpocotyle Gyrodactylus Staphylorchis	0017	1485 1051 0357
POLYCL INIDAE Pyrosoma		0926 0856	6,27	Crepidostomum DIGENA Hemiurus		0 4 64 1 5 20 0251
6,01 Trypanosoma		0753		Heterophyes Metagonimus		0957 09 57
6,03 Janickina		0673		Opisthorchis		0957
RHIZOPODA 0400 1415	5 1387	1405		Paragonimus Schistosoma		0957 03 47
6,09 CILIATA		1147	6,28	Diphyllobothrium		0957
6,11 Ichthyophthirius		0017	6,30	CESTODES		1521
Tetrahymena		1484		<i>Eutetrarhynchus</i>		1521
Trichodina		0017		LiguIa		1411
4 10 50557771				Schistocephalus		1411
6,13 PORIFERA 0613	3 0615	1817		Triaenophorus		0868
6,15 Axinella		099 3	6,31	NEMERTEA	0246	0774
SPONGIIDAE		1551	£ 00	Deskidensenie		doco
6,16 COELENTERATA 0110	0423	1444	0,00	Raphidascaris		0868
			6,35	ACANTHOCEPHALA		0606
6,17 Branchiocerianthus		0191		Neoechinorhynchus		0464
CAMPANULARI I DA E		1305		Polymorphus		0325
Cladonema		1169				
Halammohydra		1578	6,37	Asplachna		0633
Hydra		1024		ROTATORIA 0596	1195	1380
HYDROZOA	0929	1141	C 40	*** 7 99		3000
Tetraplatia Velella		1322 1172	0,42	Hippadenella		1365
			6,45	CHAETOGNATHA	0561	0718
6,18 Aurellia		1701		Sagitta	0128	06 73
Cassiopea		1843				
Paragorgia		0202	6,46	ANNELIDA	0511	0512
6,19 Condilactis		1843	6,48	POLYCHAETA		1519
6,21 Ocyropsis		0291	6,49	Nereis		0377
Pleurobrachia		0291		POLYCHAETA ERRANTIA		0376
				Trypanosyllis		0 463
6,22 Beroë		0291	6 50	Vanai ana 77a		1172
6,24 Dugesia		1649	0,00	Mercierella Owenia		0378
Polycelis		0820		POLYCHAETA SEDENTER	TA	068 3
TURBELLARIA		1060		Polydora	1230	1309
				Rhodine	_~~	0510
6,25 TREMATODES		1850				
			6,52	Aspidosi phon		1773
6,26 Bunocotyle		1706		Dendrostomum		0468
Dactylogyrus		0869		Gephyrea	0000	1774
Dictyocotyle		1017		Phascolosoma	0608	1773

6 52	Urechis			0901	6 07	INVERTEBRATES,	A 0771 77	TC (ac	ا جرده
عسرن	orecitis			0901	0,97	0401	0402	0435	0461
6,56	Limulus			0262		0483	0487	0495	0516
						0561	0567	0587	0588
6,62	ACARINA			1037		0647	0695	0741	0886
	Wandesia			0962		0904	0912	to	<i>0</i> 91 5
						0932	0939	0941	0942
6,65	Scolioplanes			0159		0948	0979	0982	0983
						0997	1022	1032	1043
6,66	INSECTA 0422	0585	1273	1515		1044	1064	1134	1229
				001.0.0		1248	1250	1251	1253
6,70	DERMAPTERA			0726		1262	1302	1310	1325
c 80	D.º			0000		1328	1341	1454	1458
0,70	Dicercomyzon			0883		1535 1738	15 4 5 17 4 0	1566	1690
	Ephemerella			1041		1/30	1740		
6 77	Calontonius			1707	7 00	ALGAE, GEN.	0002	0016	0075
0,77	Calopteryx Chorismagrion			0548	7,00	0079	0123	0160	0175
	Lestoidea			0548		0199	0214	0272	0312
				0548		0364	0391	0402	0443
	Synlestes			0030		0452	0480	0487	0509
6 82	Limnephilus			0675		0535	0567	0588	0643
عمون	TRICHOPTERA	0813	0881	0882		0647	0685	0741	0743
	IRICHUFIERA	0013	0001	0002		0891	0904	0906	0912
6 91	COLEOPTERA		0651	0831		0913	0932	0941	0942
0,04	DYTISCIDAE		0001	0651		0948	0982	0983	1043
				1622		1044	1061	1062	1064
	Hydrophilus Phartus			0569		1044	1208	1266	1295
	Rhantus			0509		1296	1302	1310	1341
6 971	CHIRONOMIDAE	0552	<i>0553</i>	0567		1370	1386	1414	1454
0,07	CULICIDAE		0000	1802		1535	1538	1566	1596
	Culicoides			0093		1690	2000	1000	1030
	DIPTERA			1713		1000			
				1,10	7.01	CHLOROPHYCEAE		0666	1595
6.89	ECHINODERMATA	0224	1636	1817	,,,,,			-,	
, ,					7,03	Chlamydown,			0995
6,91	Evasterias			0294		Dunaliella			0963
6,92	Amphiura			0279	7,06	Chlorella	0126	0582	0583
	-					0686	1112	1113	1516
6,93	Arbacia			0108		1619			
	Dendraster			0532		Scenedesmus			1413
	Echinarachnius			1191					
	ECHINOIDEA	0488	1000	1117	7,08	Enteromorpha			0776
	1135	1166				Stichococcus			058 3
	Meoma			1045		Ulva	0776	1439	1440
	Paracentrotus			1339					
	Rhynorbrissus			0330	7,11	Chaetomorpha			1185
	Sphaerechinus			1052					
	Strongylocentro	otus	0168	0532	7,32	COCCOLITHOPHOR	IDACEA.	E	0568
						Coccolithus			0108
6,97	INVERTEBRATES,	-	IC	0008		Crystallolithu	3		0568
	0012	0039	0040	0069					
	0072	0095	0146	0214	7,41	BACILLARI OPHYC		0292	0537
	0215	0298	0312	0364		0581	0909	1073	1196
						1222	1372	1596	
							1	Supp1	:T10

7,42 Biddulphia Melosira Rhizosolenia		0910	1700 1597 1357	7,99	ALGAE, MI	TSC. 0404 0933 1436	0162 0424 0934 1447	0228 0640 1196 1454	0273 0766 1378 1524
7,43 Asterionella Fragilaria Nitzschia (see	1596 Phaeo	1597 1597 dacty1	1598 1 598 um)			160 0 181 6	1608	1619	1784
Tabellaria			1413 0902	8,01	BACTERIA	0880 125 3	0182 1013 1272	0313 1042 1533	0685 1139 1711
7,63 Exuviella			0108		Bacterium	180 5	1816	1827	1851 16 34
7,65 DINOFLAGELLATA 1346	1476	0085	1147		Corynebac Escherich	cteriu hia	n		1801 0407
7,66 Gymnodinioides Gymnodinium	0001	0079	1639 1534		Pseudomor Vibrio			0750	1826 0751
7,69 Chattonella			0738	8 ,33	Dermocyst	tidium		0038	0717
				8,52	Torulopsi	ខែ		0062	1311
7,70 Trachelomonas			1289	8,70	Collema				0708
7,71 PHAEOPHYCEAE			1005	8.99	FUNGI, MI	TSC.		1066	1816
7,77 Iaminaria		0776	1748				E-10.7		1827
7,80 Cystoseira			1173	-	EMBRY OPHI	(LA) G	EAV •	0016	
Fucus Halidrys			1173 1173	9,43	Elodea			0375	1793
Himanthalia Sargassum		0837	117 3 0776		Eichhorni			0410	1027
7,81 RHODOPHYCEAE		0449	1826	9,75	Myriophy.	LLUM			1754
7,82 Conchocelia		1603	1823	9,91	Lobelia				1124
Por phyra		1603	1823	9,97	HIGHER PI	0766	0175 0851	0199 0891	0509 12 4 1
7,85 Rhodoglossum			1642			1378	1546		
7,86 Grateloupia Lithothamnion			0776 1846						
7,87 Chondrus Gracilaria Gracilariopsis	,	1409	<i>0</i> 776 1547 1408						
7,88 Rhodymenia			0776						
7,91 MYXOPHYCEAE			1450						
7,95 Nostoc			0708						
7,96 Mastigocladus			1712						

	•
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Subject Index, Supplement 1 for references 570001 to 571944

7	CFOT	eral (oceanogra	דז עמס	ENTOT OC	īV	1.6 (continued) 1227 1276 1335
T 0		ND FISHERIES)	rni, iii	гити от ос	ιŢ	
	25.	ND FISHERIES /				1375 1377 1419 1425 1477 1479 1488 1556
	7 7	Expeditions	0213	0466	0735	1477 1479 1488 1556 1827
	T 0 T	0886		1260	1894	102 (
		1915		1200	1094	2. PHYSICAL OUEANOGRAPHY AND
	ר ר	Navigation	0680	0943	0956	LIMNOLOGY
	102	1115		1452		HIMMOHOOI
	ב ד	Institutes and	_	_	1741	2.1 Practical aspects 0034 0067
	100	0063		0090	0104	0211 0225 0230 0231
		0165	-	0249	0250	0240 0241 0242 0244
		0295		0324	0327	0280 0281 0284 0453
		0328	0329	0353	to	0467 0505 0624 0735
		0356		0379	0396	0886 0947 1186 1242
		0398	0418	0419	0428	1251 1304 1358 to
		0497	0500	0503		-
		0566	0567	0625	0534 0647	
			-	_		
		0653	0656	0724	0775	2.2 General features of marine and
		0783	0784	0789	0790	inland water areas 1369
		0791	0796	0858	0896	2.3 Submarine topography 0049
		0919	0945	1031	1058	0112 0113 0172 0194
		1083	1098	1217	1269	0226 0343 0428 0462
		1332	1347	1442	1565	0477 0478 0536 0549
		1599	1656	to	1662	0554 0604 0652 0670
		1669	1675	1676	1708	0700 0710 0713 0725
		1724	1725	1739	1767	0754 0779 0865 1009
		1809		1840	1844	1015 1034 1038 1098
		1857	1866	1883	1884	1157 1164 1223 1272
	^	1886	1897	1900		1387 1405 1410 1415
-	1.4	General phenom		0072	0162	1434 1461 1471 1570
		0563	0856	1077	1335	1614 1646 1704 1705
		1459				1718 1756 1849 1865
	1.5	General appara		0755	0799	1896 1906 1912 1936
		0965		1090	1260	2.4 Physics of sea and fresh waters
		1732				0276 0298 0490 0564
	1.6	General books		0150	0158	0806 0825 0843 0991
		0199		0219	0235	1427 1684 1783 1813
		0315	-	0382	0385	1856 1944
		0417	0425	0429	0436	2.5 Chemistry of sea and fresh waters
		04 37		0509	0546	0005 0044 0046 0099
		0588		0781	0788	0190 0259 0276 0293
		0888		0953	0976	0310 0336 0460 0469
		0981	1026	1099	1221	0475 0477 0539 0571

2.5 (continued)	0589	0685	0743		2.7	(cont	inued)	1114	1127	1138
075	-	0776	0787		·	•	1148	1149	1150	1181
078		0843	0867				1259	1264	1294	1317
087		0900	0984				1318	1327	1433	1469
102		1071	1082				1511	1683		
	_						-		1785	1786
109	,	1218	1252		0 0	-	1787	1792	1904	-0.00
128		1284	1298		2.8	Ice	0514	0515	0603	1238
133		1343	1374				1239	1397	1687	1760
142	9 1457	1518	1523				1761	1810		
163	31 1641	1662	1685		2.9	Coasta	al ocea	nograp	hy and	1
169	1699	1731	1776			lim	nology	0014	0066	0180
177	9 1812	1888	1938				0194	0229	0363	0373
2.6 Structure, dy	namics a	and					0408	0469	0472	0474
circulation		0078	0123				0528	0536	0554	0589
015	•	0178	0179				0616	0617	0693	0695
020		0205	0222				0703	0714	0736	075 7
023	_	0283	0284				0760	0771	0787	0842
		_						0865	0880	
028	_	0384	0386				0855			0892
039		0427	0428				0931	0940	0970	1006
043		0474	0494				1043	1071	1182	1195
051		0594	0603				1208	1218	1261	1267
063	_	0702	0711				1288	1290	1298	1325
071	.9 0720	0724	0764				1326	1362	1383	1395
081	C 0818	0829	0842				1435	1449	1454	1518
087	0 0871	0897	0898				1527	1558	1562	1567
091	3 0930	0949	0950				1573	1585	1594	1595
095		0969	0970				1637	1643	1662	1679
097	_	0975	0977				1685	1718	1726	1776
097		1035	1053				1861	1938	2120	1110
106		1109	1158				1001	1/50		
			-	2	TOT AT	TT/TH / \TT				
116		1287	1301	٥٠	PLAN	NKTON				
130		1333	1369			~			0010	
139		1423	1438		3.1	Genera		0039	0040	0214
148		1517	1537				0312	0319	0364	0487
154		1550	1576				0904	0912	0913	0932
15 8	-	15 88	1589				0963	0982	0983	1064
160	9 1644	1651	1663				1080	1081	1251	1302
166	4 1665	1688	1691				1451	1535	1566	
174	4 1766	1822	1832		3.2	Zoopla	nkton	0021	to	0026
183	7 1896		*				0106	0128	0162	0185
	and wate	r leve	1				0245	0291	0319	0360
012		0195	0229				0376	0423	0461	0529
038		0441	0465				0530	0531	0547	0561
049		0551	1010				0579	0592	0628	0634
							0705	0718		0748
101	1 1012	1014	1054				_		0741	
							0749	0817	0836	0856
							0878	0886	0929	1169
									1	Sunnie St

3.2 (continued)	1177	1195	1248	4.2	(continued)	1531	1578	1713
1262	1292	1301	1320		1773	1774	1781	1794
1322	1444	1536	1701		1802	1814	1815	1821
	₩ el-cl-cl-	1750	1101				_	1021
1740		0007	0000	4 3	1835	1928	1942	
3.3 Phytoplankton	0070	0001	0002	4 . 3	Zoobenthos -			
0075	0079	0085	0108		ecology	0011	0074	0083
0292	0367	0409	0452		0084	0138	0139	0146
0482	0535	0537	0738		0202	0224	0251	0286
0909	1061	1062	1065		0346	0347	0349	0401
1073	1196	1222	1296		0406	0415	0416	0457
1341	1357	1414	1476		0495	0510	0511	0512
1 538	1596	1597	1598		0519	0520	0552	0569
	1)70	エフフィ	1)30			-		
1700		05.00	0017		0596	0623	0632	0651
3.4 Nannoplankton		0568	0941		0658	0679	0683	0731
0942					0759	0768	0769	0770
3.5 Productivity		0367	0368		0777	0804	0813	0827
0443	0741	1213	1386		0831	0832	0878	0913
1538					0914	0926	0938	0957
					0962	0979	0993	1017
BENTHCS					1032	1040	1041	1044
5 Aud And Aud & Aud & Aud & Aud					1060	1089	1102	
4 7 0 7	0000	0060	0076					1104
4.1 General	8000	0069	0076		1134	1147	1171	1172
0109	0182	0215	0480		1230	1233	1235	1240
0483	0587	0678	0695		1244	1273	1289	1292
0906	0997	1022	1166		1299	1305	1314	1334
1173	1229	1250	1251		1380	1415	1436	1490
1295	1831	1843			1508	1515	1519	1521
4.2 Zoobenthos - sys			d.		1531	1545	1560	1579
development		0029	0136		1622	1636	1639	1649
0176	0186	0191	0200		1768	1773	1774	1846
0201		0286			1847	1867	1869	1928
	0279		0304			1001	1009	1920
0305	0330	0337	0345		1942			,
0349	0372	0406	0411	4.4	Zoobenthos -			
0412	0510	0538	0548		behaviour	0037	0045	0087
0553	0569	0596	0611		0093	0098	0110	0159
0646	0657	0673	0677		0187	0201	0257	0260
0679	0683	0709	0726		0262	0293	0294	0323
0731	0767	0768	0769		0344	0345	0348	0350
0772	0773	0774	0804		0378	0422	0463	0468
0827	0831	0832	0833		0473	0484	0488	0504
0881	0882	0883	0901		0519	0521	to	0526
0926	0961	0962	0993		0532	0540	0544	0562
1037	1039	1041	1045		0599	0607	0608	0615
1104	1128	1135	1141		0631	0633	0645	0661
1142	1195	1224	1247		0674	0675	0739	0746
1305	1365	1405	1456		0747	0759	0777	0797
- 3 - 7			-					

	4.4 (continue	150	0020	0840	0915		E 3	oar	.:010	0053	0054	0103
	4.4 (0011011100	0988	0994	1000	1024		رەر	O CAL	0105	0365	0426	0458
		1039	1040	1052	1070				0502	0555		
		1039	1087								0556	0557
				1111	1117				0570	0663	0667	0733
		1135	1151	1191	1220				0780	0873	0903	0922
		1234	1307	1309	1339				1018	1232	1337	1421
		1348	1349	1458	1462				1513	1564	1604	1615
		1484	1531	1541	1568				1647	1667	1670	1697
		1569	1610	1639	1698				1778	187	1074	1878
		1707	1716	1717	1764				1385	1889		
		1807					5.4	Groun	ds and			
	4.5 Phytobent			0016	0126				0043	0081	0134	0152
		0160	0182	0220	0272				0174	0263	0309	0341
		0273	0275	0292	0313				0414	0435	0445	0446
		0336	0375	0391	0407				0533	0576	0637	0644
		0410	0424	0449	0509				0681	0566	0944	0964
		0560	0581	0582	0583				1047	1092	1093	1118
		06:10	0643	0666	0686				1160	1134	1137	1199
		0708	0743	0766	0776				1200	1231	1276	1279
		0837	0851	0891	0902				1426	1431	1455	1480
		0909	0910	0933	0934				1616	1617	1618	1620
		0995	1005	1013	1027				1621	1681	1708	1746
		1042	1043	1100	111.							1879
		1113	1124	1139	11/2				1881	1387	1893	1898
		1105	12.11	1266	1311				1901	1905	1908	1909
		1312	1370	1.71	1370				1914	1916	1922	1930
		1400	1409	1-;13	1.436				1931	1939		
		1439	1440	1447	1450		5.5	Fish	technol	огу.	0404	0431
		1516	1524	1533	1534				0486	0794	0830	0835
		1546	1547	1600	1603				0952	0889	1345	1363
		1608	1619	1634	1642				1396	1543	1742	1927
		1711	1712	1748	1784		5.6	Econo	mics of	-		0491
		1793	1316	1823	1826				1175	1179	1187	1556
		1851										
						6.	AQU.	TIC S	TOOKS			
5.	FISHING											
							6.0	Gener	al biol		0003	0032
	5.1 Statistic				0031				0371	0374	0447	0598
		0068	0264	0265	0326				0649	-	0716	8080
		0545	0576	0672	0792				0910	1029	1049	1059
		1060	1069	1178	1179				1110	1125	1128	1132
		1184	1255	1277	1278				1133	1155	1215	1316
		1379	1689						1355	1360	1407	1437
	5.2 Vessels		0267	0268	0335				1491	-	1509	1611
		0793	0794	0812	1048				1629		1729	1730
		1564	1940						1759	1762	1769	1770

6.0 (continued)	1772	1829	1859	6.2 (continued) 1559 1574 1587
1918	1919	1937		1588 1605 1611 1633
6.1 Systematics	0012	0021	to	1635 1640 1714 1737
0027	0100	0101	0102	1765 1780 1791 1806
0129	0153	0163	0189	1819 1820 1836 1860
0261	0317	0332	0370	1870 1934 1935 1943
0403	0431	0432	0459	6.3 Physiology and behaviour 0004
0575	0580	0590	0591	0007 0009 0035 0036
0620	0638	0669	0696	0041 0042 0047 0056
0723	0762	0763	0809	0057 0060 0062 007
0863	0908	0924	0937	0096 0097 0121 013
0981	0990	0999	1036	0141 to 0144 015
1046	1153	1154	1210	0154 0155 0164 0168
1225	1228	1324	1356	to 0171 0173 0183
1375	1467	1473	1494	0183 0192 0196 020
to	1499	1529	1540	0208 0210 0220 022
1555	1557	1577	1590	0227 0237 0247 0252
1613	1652	1653	1655	0255 0258 0266 027
1721 1751	1727	1734	1749	0278 0290 0293 0300
1811	1780 1841	1782 1842	1803 1853	0302 0303 0308 031° 0318 0321 0322 0339
1864	1882	1902	10)3	03 1 8 0321 0322 0339 0373 0395 0444 0452
6.2 Distribution ar				0471 0485 0492 051
0013	0015	0027	0033	0518 0543 0574 0586
0050	0051	0077	0080	0601 0602 0605 0609
0088	0118	0149	0156	0612 0613 0635 0648
0157	0188	0198	0209	0659 0662 0665 0668
0238	0301	0320	0360	0676 0682 0684 068
0383	0430	0431	0448	0688 0689 0692 0692
0455	0456	0542	0558	0698 0712 0721 0722
0559	0614	0618	0639	0729 0730 0737 0740
0694	0704	0737	0778	0757 0758 0761 0798
0786	0823	0838	0841	0803 0805 0814 0819
0 859	0864	0879	0911	0826 0 828 0 83 5 08 45
0920	0927	0928	0952	0848 0849 0850 0860
0981	0982	0986	0989	to 0863 0874 0877
0992	1007	1016	1025	0889 0893 0899 0907
1028	1055	1072	1074	0911 0915 0916 0917
1085	1105	1137	1144	0921 0923 0925 0937
1152	1153	1175	1183	0954 0959 0978 0985
1197	1204	1205	1206	0987 1003 1018 1030
1226	1268	1300	1321	1055 1057 1106 1108
1328	1340	1353	1377	1129 1131 1143 1159
1383	1416	1424	1441	1161 1162 1163 1192
1448	1453	1460	1483	1193 1207 1211 1212 1216 1246 1249 1256
1499	1504	1529	1536	1216 1246 1249 1256

				/		-00-		-0
6.3 (continued)	1257	1270	1271	6.5 (continued)	0885	0886	0890
1274	1291	1293	1313		0918	0959	0986	0998
1319	1336	1352	1 364		1019	1121	1122	1126
1373	1388	1391	to		1133	1156	1163	1190
1394	1396	1398	1400		1265	1301	1315	1323
1403	1404	1418	1428		1328	1338	1354	1372
1458	1463	1464	1466		1384	1385	1400	1417
1468	1470	1502	1506		1426	1432	1446	1460
1528	1530	1552	1554		1481	1503	1506	1507
1571	1572	1583	1601		1532	1561	1607	1612
1602	1606	1607	1625		1624	1526	1627	1628
1632	1638	1650	1654		1650	1666	1671	1719
1655	1692	1693	1695		1723	1758	1767	1771
1702	1703	1720	1742		1799	1819	1820	1833
			1763		1834	1855		1899
1743	1752	1757				1000	1875	1099
1777	1789	1790	1796		1910	0: 1:		
1797	1807	1818	1824	0.0	election by	ilshi	ng gea	-
1825	1839	1845	1852					1482
1854	1873	1929		6.7 A	arking	0114	0116	0119
6.4 Parasites, dise	CARD C				0147	0148	0233	0256
abnormalities	-	0017	0038		0270	0271	0289	0299
0091	0246	0325	0357		0737	0765	0834	1079
0434	0464	0578	0593		1094	1119	1382	1500
0606	0717	0750	0751		1501	1668	1728	1733
0752	0753	0785	0807		1868	1876	1877	1890
08 50	0868	0869	0939		1903	1929		
0957	0990	1033	1051	6.8 F	isheries fo	r part	icular	species
1136	1194	1198	1202		or groups	0018	0019	0020
1230	1253	1346	1366		0028	0048	0052	0135
1411	1474	1485	1520		0145	0248	0282	0326
1521	1706	1723	1800		0400	0432	0445	0446
1801	1804	1805	1850		0482	0565	0595	0650
6.5 Stock fluctuati		_			0728	0732	0742	0839
population st			0018		1056	1076	1101	1125
0030	0058	0059	0125		1128	1130	1167	1275
0127	0145	0184	0218		1330	1402	1407	1514
0288	0296	0338	0358		1551	1580	1630	1651
0359	0362	0366	0369		1759	1808	1830	1862
0381	0387	0388	0393		1870	1880	1913	1916
					1917	1926	1928	1910
0394	0401	0420	0421	6 O T				h
0433	0450	0451	0489	0.9 1	atcheries,			
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0821	0844	0853	0854		0287	0306	0331	0333

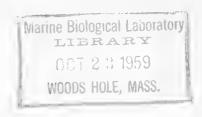
6.9 (continued)	0377	0389	0405	7.2 (continued) 07	95 0811	0815
0493	0506	0508	0517		22 0829	094.6
0541	0593	0600	0629	0948 09	55 0958	0960
0642	0660	0664	0736	0967 09	96 1021	1116
0745	0766	0782	0802	1123 11	56 1201	1208
0824	0840	0847	0875	1209 12	14 1219	1254
0895	0905	0935	0936	1329 13	31 1367	1381
0980	1001	1002	1075	1412 14	30 1443	1487
1078	1084	1091	1093	1512 15	15 1527	1562
1095	1103	1120	1145	1973 15	81 1631	1672
1146	1165	1176	1183	1710 17	22 1735	1736
1188	1189	1236	1243	1745 17	50 1753	1755
1245	1258	1286	1297	1817 18	38 1871	1872
1303	1310	1323	1351	1886 1 8	92 1897	man y pro-
1389	1399	1401	1406	1911 19	24	
1419	1420	1445	1468	7.3 Special bibliog	raphies	
1475	1478	1492	1493		52 0479	0516
1503	1510	1522	1539		44 0816	0876
1542	1543	1553	1563		97 1237	1472
1591	1592	1593	1623	-	80 1696	
1645	1673	1674	1677	7.5 Terminology, no		
1678	1689	1690	1714	definitions	0706	1170
1738	1754	1769	1788	1350		
1858	1875	1891	1921	7.6 Legislation	0216	0239
1923	1925	1932	1933		79 1682	1798
				1848		
MISCELLANEOUS AND	AUXILLA	RIES		7.7 Personal		0704
7 7 %			٦	Das, Basant Kur Hamilton, J.E.	ar	0124 1088
7.1 Mathematical amethods	0094	0095	0107	Sverdrup, Haral	d III mile	0006
0641	0671	0697	0853	Thompson, Harol		0627
0887		1063	_	riionipaoni, iraxox	u.	0021
1107	1174	1203	1263			
1350	1376	1747	1750			
7.2 General	0005	0055	0061			
0064	0071	0089	0092			
0111	0130	0161	0166			
0193	0221	0269	0297			
0298	0307	0311	0316			
0334	0340	0353	0390			
0392	0399	0402	0408			
0439	0460	0470	0474			
0480	0495	0496	0507			
0527	0539	0550	0584			
0585	0597	0626	0654			
0699	0701	0734	0760			

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         570095
                               En 570131
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                               Co 570846
         571023
                               Re 571747
         571043
                               Co 571044
                               Le 570368
         571213
                               Co 571371
         571370
         571384
                               Co 571385
                               Re 570727
         571556
         571574
                               Re 571770
         571635
                               Re 571770
                               Re 571770
         571650
         571708
                               Co 571709
                               Re 571770
         571771
                               Le 570335
         571940
         581063
                               Re 570476
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FOOD AND AGRICULTURE ORGANIZATION OF THE UNLTED NATIONS Viale delle Terme di Caracalla, Rome, Italy



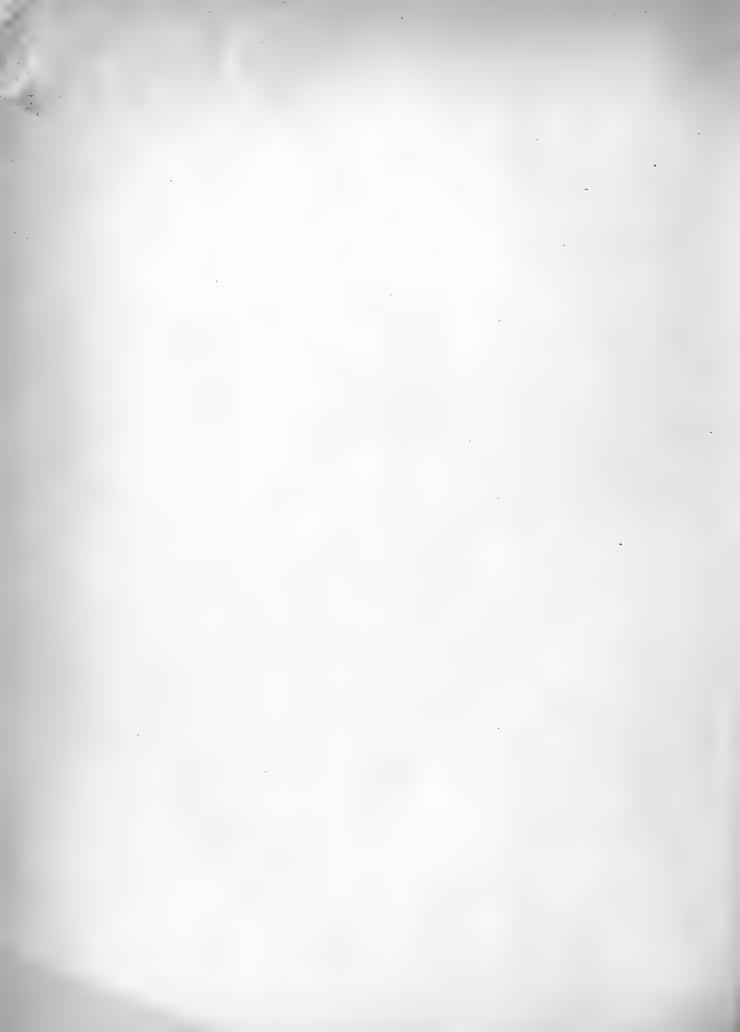
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D. Ballantine (1957)
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The toxin from Gymnodinium veneficum
Ballantine

Methods of extraction of the toxin from cultures of Gymnodinium veneficum are described. The action of the toxin on a variety of animals is described, and an attempt is made to devise an approximate assay technique using gobies as the test animals.

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An application of the modified Abramson and Evans criteria. The main criterion used was the nose-up-tail-down position of the fish at an angle of approximately 45 deg. or more.

HR:hr

W.

FAO.hr

M

Abbott, W. (1957) 570002 Ecology, 38:152 Unusual phosphorus source for plankton algae

Reports that the presence of phosphorus was demonstrated in colloidal matter and discusses the hypothesis that this is the source of nutritive phosphorus for the algae under the conditions found.

Acara, A. (1957) 570005

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Haliç'in pollusyon'u Hakkinda (About the pollution of the Golden Horn)

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FAO:glk

F

SJH:sjh

M

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Vop.Ikhtiol., 8:107-15

Ryby Kuiu-Mazarskogo vodokhranilishcha (Fishes of the Kuiu-Mazar reservoir)

Biological and other notes on spp. of Cyprinidae, 1 of Siluridae, and 1 of Poecilidae with recommendations concerning the fishery of the reservoir.

Acara, A. (1957) 570006

Balık Balıkçılık, 5(12):1-2

Oseanografinin kaybettigi bir kiymet

Harald Ulrik Sverdrup (An
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Obituary of H.U. Sverdrup.

FAO:glk

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Aldinger, H. (1957) 570010 <u>Verlag Paul Parey</u>, 302 p. Die Angelfischerei (Fishing with the line). (10th ed.).

Report on aquarium experiments.

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Description of the quantitative and qualitative changes in the lakes between 1933 and 1955.

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Methods and results of an experiment in which artificial substrata, immersed for 12 weeks at a depth of 45 feet (ca 14 m) below mean sea level, were periodically examined in situ by aqualung diving, as well as in the laboratory.

FAO:tl

MF

FAO: wad

M

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J.R. Brett (1957)

J.Fish.Res.Bd Can., 14:783-95

Some effects of kraft mill effluent on young Pacific salmon

Sockeye salmon underyearlings (Oncorhynchus nerka) were exposed to various concentrations of full-bleach kraft mill effluent under experimental conditions simulating those anticipated in the estuary of the Somass River at the head of Alberni Inlet, B.C.

Aleev, Iu.G. (1957) 570012

Vop.Ikhtiol., 8:55-76

Kharakteristika i topografiia funktsii
plavnikov ryb (Characteristics and
functional topography of the fins of fish)

Centre of gravity determination, and calculation of an index of agility of fish of various species and ages and compositions within and between species; proposal of four hydrodynamic zones of the body of a fish and description of representative species in terms and the characteristics of these species.

Fa0:glk

F

FAO: glk

MF

Allen, E. Ross and 570013 570016 Allen, M.B., F.R. Whatley W.T. Neill (1957) and D.I. Arnon Plant Physiol., 32 (Suppl.):iii Copeia, (2):143-4 Another record of the Atlantic leather-Conversion of light into chemical energy back, Dermochelys C. coriacea, nesting in photosynthetic phosphorylation on the Florida coast (Abstract) Paper presented at the meeting of the American Society of Plant Physiologists and the Physiological Section, Botanical Society of America, Stanford, California, August 25-29, 1957. HR WF M FAO 570014 570017 Allen, F.H. and Allison, R. (1957) Progr. Fish Cult., 19(2):58-63 J. Grindley (1957) Some new results in the treatment of Dock Harb. Author., 435:302-6 Radioactive tracers in the Thames ponds to control some external parasites of fish estuary Methods used and results obtained to control Trichodina, Gyrodactylus, Ichthyophthirius, using formalin and potassium permanganate. F MF WAD: wad 570018 Allen, G.H. (1957) 570015 Alm, G. (1957) Svensk FiskTidskr., 66(11):171-5 Dissert.Abstr., 16(10):1967 Migration, distribution and movement of Växlingarna i gädd- och abborrfångsten Puget Sound silver salmon vid Ostersjökusten (Fluctuations in the pike and perch catches on the Baltic coast)

MF

FAO:tl

the fluctuations.

F

Description of fluctuations from 1909-1955 and discussions on the reasons for

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Monthly catches size data and discussion of the reasons for the catch distribution in different areas.

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TL:tl

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SJH:efa

MF

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Altan, H. (1957) 570023 Balık Balıkçılık, 5(2):21-3 Karadeniz balıklarının pelâjik yumurta ve lârvalarının tâyin anahtarı: 1. Uskumru balıgı - Scomber scombrus L. (A key to pelagic eggs and larvae of the Black Sea fishes: 1. Scomber scombrus L.)

Brief review of investigations made, with a determination key for eggs and larvae of sp.

Karadeniz balıklarının pelâjik yumurta

key to pelagic eggs and larvae of the

ve lârvalarının tâyin anahtarı: 2.

Black Sea fishes: 2. Sarda sarda)

MF

SJH:efa

Altan, H. (1957)

Content as per title.

Balık Balıkçılık, 5(4):19-21

Palamut balıgı - Sarda sarda

570024

570021 Altan H. (1957) Balık Balıkçılık, 5(10):20-3 Karadeniz balıklarının pelâjik yumurta ve lârvalarının tâyin anahtarı: 6A - Karadenizin çaça (şprot) balıgı -Sprattus sprattus phalericus Risso, Sardalya baligi-Sardina pilcharaus sardina Günther (A key to pelagic eggs and larvae of the Black Sea fishes;' 6A - Sprattus sprattus phalericus, Sardina pilchardus sardina)

Illustrated.

SJH:sjh

SJH:efa

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SJH:efa

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570028 Alverson, F.G. and D.M. Shimada (1957) Bull. Inter-Amer. trop. Tuna Comm., 2(2): A study of the eastern Pacific fishery

for tuna bait fishes, with particular reference to the anchoveta (Cetengraulis mysticetus)

Briefly describes the origin and development of the bait fishery important for tuna fishing (Neothunnus macropterus and Katsuwonus pelamis), its operations, extent and yield, and discusses some aspects of the effects of exploitation on the Eastern Pacific bait fish populations. HR:hr

570029 Amar, R. (1957) Bull. Inst. océanogr. Monaco, 1100:1-9 Gnathostenetroides laodicense nov.gen.nov. sp. Type nouveau d'asellota et classification des isopodes asellotes (Gnathostenetroides laodicense nov. Jen.

nov.sp. New type of asellota and classification of isopods asellots)

A taxonomic study of the organisms collected on the coast of Syria.

SJH: efa

FAO:hr

Ancellin, J. (1957)

Alvarez del Villar, J. et al. (1957) 570027 Com. para el Fomento de la Piscic.rural, Mexico, 62 p.

Los peces del Valle de Mexico (The fishes of Mexico Valley)

Historical review of ichthyological studies in the region; taxonomic key to and description of the spp., principally of the genera Cyprinus, Carassius, Notropis, Algansea, Evarra, Salvelinus, Salmo, Girardinichthys, Chirosoma, Lepomis, and Micropterus. Ill., with morphometric data, distribution and habitat; discussion of origins and relations of this fauna.

FAO:hr

Sci. Pêche, 43:1-10 Considérations sur les harengs du sud de la Mer du Nord et de la Manche orientale (Considerations on herrings from the south of the North Sea and the eastern English Channel)

Contains information on races, migrations, spawning and stock characteristics.

HR:sjh

Anderson, A.W. and 570031 E.A. Power (1957) Statist.Dig.U.S.Fish Wildl.Serv.,

(39), 374 p. Fishery statistics of the United States, 1954

Anderson, W.W. and 570034
J.W. Gehringer (1957)
Spec.sci.Rep.U.S.Fish Wildl.Serv., (210)
Physical oceanographic, biological and chemical data - South Atlantic coast of

the United States. 'THEODORE N. GILL'

Biological methods and procedures; narrative account of cruise; explanation of data sheets and tables; tables.

MF

GLK:glk

cruise 3

M.

Anderson, W.W. (1957) 570032

Fish.Bull., U.S., 57(119):397-414

Early development, spawning, growth and occurrence of the silver mullet (Mugil curema) along the south Atlantic coast of the United States

Contents as per title.

Andreu, B. and

5700 35

J. dos Santos Pinto (1957) Invest.pesq., 6:3-38

Características histológicas y biométricas del ovario de sardina (Sardina pilchardus Walb.) en la maduración, puesta y recuperación. Origen de los ovocitos (Histological and biometrical characteristics of sardine ovaria during ripening, spawning and recovering)

Description (well illustrated) of the microscopic and macroscopic changes of the gonad during ripening, spawning and recovering; with notes on the mechanism of spawning and on the renewal of the reserve ovecytes.

FAO: glk

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FAO:glk

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Anderson, W.W. (1957) 570033
Fish.Bull.,U.S., 57(120):415-25
Larval forms of the fresh-water mullet.
(Agonostomus monticola) from the open ocean off the Bahamas and South Atlantic coast of the United States

First record of this species from open ocean. Larvac described and their anatomical characters compared with comparable-sized young of Mucil curema and M. cephalus. The suggestion is made that A. monticola is catadromous.

FAO:glk

F

Andreu, B. and 570036
J. dos Santos Pinto (1957)

Notas Estud. Inst. Biol. Marit., 17:1-27

Características histológicas y biómetricas del ovario de sardina (Sardina pilchardus Walb.) en la maduración puesta y recuperación. Origen de los ovocitos (Histological and biometric characteristics of the sardine ovary (Sardina pilchardus Walb.) during ripening, spawning and recovering. Origin of the ovocites

A review is made of present knowledge on histological changes in sardine ovaria, accompanying ripening, spawning and recovering. The authors prove histologically that every female pilchard is able to spawn many times in the same spawning season. Factor

Andrews, J.D. (1957)570037 Proc. Nat. Shellf. Ass., 46(1955):140-54 Trapping oyster drills in Virginia. I. The effect of migration and other factors on the catch

The relative importance of migratory and resident populations of drills in the predation of oysters, particularly on small plots, is unresolved. One year of trapping on a three-acre plot on abandon-; ed public grounds suggested that considerable migration occurred. Eupleura was much more abundant than Urosalpinx in the catches.

FAO:hr

MF

FAO:sjh

Anraku, M.

limited area

(1957)

Bull.Fac.Fish.Hokkaido, 7(1):1-16

Some experiments on the variability of

horizontal distribution of plankton in a

Deals with the variability of catches in

horizontal tows with fish-larva net and

plankton catcher, and with a preliminary

observation whether the distribution of

random or non-random in a limited area.

planktonic animals is statistically

in high-speed tows with handy underway

horizontal plankton hauls and on the

M

570040

570038 Andrews, J.D. and W.G. Hewatt (1957) Ecol. Monogr., 27(1):1-25 Oyster mortality studies in Virginia. II. The fungus disease caused by Dermocystidium marinum in oysters of Chesapeake Bay.

Description of incidence geographically and seasonally; relation of infection with age and source of oysters; experimental infection: examination of the relation of infection with temperature, salinity, handling and other factors; discussion of the importance of this organisms as cause of disease. GLK:glk M

Aoyama, T. (1957) 570041 Bull. Jap. Soc. sci. Fish., .22:679-84 (On the regeneration of the teleost scale, with special reference to the yellow sea bream, Taius tumifrons). Ni En

From consideration of regenerated scales percentage variation at each age /6.8% at 0 and I, 3% about one year from sample of 263 fish taken in East China, 11/51-10/52, concludes cause of falling off of scales is physiological rather than mechanical.

SJH:sjh

M

Anichini, C. (1957) Bull.Inst.oceanogr.Monaco, 1098:1-10 Ricerche di biologia marina nei mari circostanti la Sardegna (Marine Biological Research in the seas surrounding Sardinia)

Applegate, V.C., J.H. Howell and A.Z. Hall, Jr. Spec.sei.Rep.U.S.Fish Wildl.Serv., (207):157 p. Toxicity of 4,346 chemicals to larval lampreys and fishes

A quantitative and qualitative study of Paport on screening tests made in search the Gulf of Cagliari plankton variations. for chemicals toxic to Petromyzon marinus and also tested on Salmo gairdneri and Lepomis machrochirus.

FAO: hr

M

GLK: wad

F

Ariav, Y. (1957) 570043 Arnold, J.R. and 570046 Fish.Bull., Haifa, (14):16-7 E.C. Anderson (1957) (Summary of a pelagic fishery season). Tellus, 9:28-32 The distribution of carbon-14 in nature Iw The carbon-14 activity of oceanic materials indicates that the mixing half-time for carbon between the atmosphere and ocean surface waters is one or two decades, while the turnover time for the ocean as a whole is several hundred years. SJH FAO: jra M M Armstrong, F.A.J. (1957) 570047 570044 Aronson, L.R. (1957) In "The Physiology of Fishes". Vol. II J.Mar.biol.Ass.U.K., 36:509-17 The iron content of sea water Behaviour. Edited by M.E. Brown, Academic Press Inc., Publishers, New York, pp. 271-304 A method, suitable for routine use, of Reproductive and parental behaviour determining total iron in sea water is described. Tests of the method, collection and storage of samples and the variability of results are described. Iron contents of water samples from the English Channel and the Bay of Biscay are reported. GLK: hr M FAO MF 570045 Arnold, D.C. (1957) 570048 Arora, H.L. and J.Mar.biol.Ass.U.K., 36(1):121-8 S.K. Banerji (1957) Indian J.Fish., 4(1):80-91 The response of the limpet, Patella Flying-fish fishery along the Coromandel vulgata L., to waters of different salinities coast Patella vulgata gives a positive response Estimate of total catch by sampling to splashing with sea water or water of method; lenght-frequency, sex-ratio, and high salinity, and a negative response to maturity and stomach contents, of the fresh water or water of low salinity. The Cypsilurus coromandelensis catch. intensity of the positive response broadly corresponds with the salinity of the water used. A positive response is given to NaCl' solutions of concentrations approximately; equivalent to sea water, while a supranormal response is given to concentrations, somewhat above that of sea water. GLK:glk M

	Arrhenius, G., M.N. Bramlette and E. Picciotto (195 Nature, Lond., 180:85-6 Localization of radioactive and heavy nuclides in ocean sediment Occurrence of ionium, thorium, ruranium and other rare elements different types of marine deposi	stable s adium, in	Artüz, M.I. (1957) Balık Balıkçılık, 5(10):1-6 1957 Agustosunda palamut durumu bonito situation in August 1957) Turkish catches, weight, length relation.	570052 (The
	GLK:t1	M	SJH:sjh	M
	Artüz, I. (1957) Balık Balıkçılık, 5(3):21 Türkiye sularında ilk defa tesbi edilen bir balık türü: Trichiuru lepturus (Linne) (A new fish species caught in Turkish sea wa Trichiurus lepturus (Linne)) Reports the catch and reviews th biology and distribution of sp.	ters:	Artüz, M.I. (1957) Balık Balıkçılık, 5(4):15-9 Elektrik akımı ile balıkçılık. I (Electro-fishing. I.) A popular article reviewing princof fishing by electric shocker.	
	SJH:efa	M	SJH:efa	M
	Artüz, I. (1957) Balık Balıkçılık, 5(7):1-6 Akdeniz faunasının menşei hakkın (The origin of the Mediterranean A feature article about the diff species of fish living in the Mediterranean.	fauna) '	Artüz, M.I. (1957) Balık Balıkçılık, 5(5):17-21 Elektrik akımı ile balıkçılık. I. (Electro-fishing. II.) A popular article reviewing metho of fishing by electric shocker.	
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Artüz, M.I. (1957) 570055

Balık Balıkçılık, 5(6):1-4

Balıkçılık biyolojisi ve problemleri
(Fishery biology and its problems)

The author describes the problems met by fishery biologists and gives examples concerning Turkish seas and lakes. Asami, T. (1957) 570058

Rep.Nankai reg.Fish.Res.Lab., 5:74-83

(Annual variation of species composition of fishes migrating along the coast of Nankai region of Japan). Ni En

Analysis of yearly and monthly catch distributions of Sardinops melanosticta, Etrumeus micropus, Engraulis japonica and mackerels and horse mackerels.

SJH:sjh

WF

FAO:sjh

M

Artüz, M.I. (1957) 570056
Balık Balıkçılık, 5(2):7-10
Balıklarda üreme. I. (The procreation process in fishes. I.)

A popular article on the manner of reproduction.

Asami, T. and M. Hanaoka (1957) 570059

Rep.Nankai reg.Fish.Res.Lab., 5:59-73

(On the variation of vertebral number of Iwashi, with special reference to its possibility of being a clue for testing difference of races or of environmental conditions during their development).

Ni En

Analysis of data for 1949-55 from coastal stations, Nankai region, in relation to environmental conditions. Autumn and spring broods distinguished, and therefore growth identified up to 10 cm, after which mixing occurs.

SJH: efa

MF

FAO:sjh

M

Artüz, M.I. (1957) 570057

Balık Balıkçılık, 5(3):6-10

Balıklarda üreme. II. (The procreation process in fishes. II.)

A popular article on the manner of reproduction.

Asami, T., F. Kamiura 570060 and T. Yokota (1957)

Rep.Nankai rog.Fish.Res.Lab., 5:38-58

(Research on spawning of Iwashi fishes, with special reference to that of anchovy in 1953, in Hyuga Nada).

Ni En

Results of monthly collections regarding horizontal distributions.

SJHeefa

MF

FAO:sjh

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Ashby, A.W. (1957) 570061 Associazione per lo Sviluppo 570064 J.agric. Econ., 12:262-82 dell'Industria nel Mezzogiorno (1957 The future pattern of food consumption Roma, 1957, 122 p. I laghi salsi dolla Sardogna in the United Kingdom (The salt lakes in Sardinia) Includes comment on pattern of fish consumption; followed by discussion. FAO: sjh MF M Assman, A.V. (1957) 570062 Atlantic States Marine 570065 Fisheries Commission (1957) Zool.Zh., 36(6):900-7 On the role of microorganisms as a source New York, 94 pp. of food for the young fish). Fifteenth annual report of the Atlantic States Marine Fisheries Commission Experiments on the feeding of hydrolysis yeasts Candida and Torulopsis utilis to Administrative report with notes on the young of Acipenser guldenstadtii research work in progress. Brandt, and of Torulopsis utilis and the Azotobacter chroccoccum to young Guppyi sp., Xiphophorus sp., and Macropodus sp. Change of Weight and mortality during the experimental period were taken as indicators of the results of the experiments. MF FAO: glk FiB:glk Audouin, J. (1957) Association Internationale de 570066 570063 Fish. Ind., Moscov, 21:357-75 Limnologie Thécrique et Appliquée. Section Française Note proliminaire sur l'hydrologie de (1957)l'étang de Thau (Preliminary note on Vie et Milieu, 8(1):99-108 the hydrology of Thau pond). Compte rendu des séances de travail -Banyuls, 14-17 Mai 1956 (Proceedings of the work sessions) Geographic situation and meteorological conditions of the pond; diurnal and annual variations in hydrological Contains the records of the meeting conditions, and comparison with other encompassing discussions on technical activities. ponds. M FAO:glk FAO:hr

Austin, T.S. (1957) 570067 Spec_sci.Rep.U.S.Fish Wildl.Serv., (217):186 p.

(217):186 p. mmar ${f y}$, oceanographic and biological

Summary, oceanographic and biological data, Marquesas Islands, area, August-September, 1956 (Equapac)

570069 (Card 2)

"Ekman" grab. Treatment of catch; tests in Black Sea.

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Bachmann, R.W. (1957)

Progr. Fish Cult., 19(1):44-6

Professionalism in fishery biology

Review (based primarily on a question-

the opportunities for fishery biologists to act as consultants for owners of

naire sent to the 48 U.S. states) of

private waters or to manage these

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570071

Australia. Commonwealth Bureau 570068 of Census and Statistics (1957)
Canberra, 18 p.

Statistical Bulletin Fishing and Whaling, Australia No. 2, 1955-56

Gives for years 1951-56 quantities and values of catches of fishes, crustaceans, molluscs, pearl and trochus shell, and whales; boats and equipment in use, men employed; leaves granted.

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WAD: wad

waters.

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Bacescu, M. (1957) 570069 Bul.Inst.Cerc.piscic.Roman., 16(2):

Apucatorul-sonda pentru studiul cantitativ al organismelor de fund - un aparat mixt pentru colectarea simultana a macro- si microbentosului (A grab for quantitative study of organisms living in deep waters - a new apparatus for the simultaneous capture of macro- and microbenthos). Ru Fr

Illustrated description of design and use of a modified and improved

Backus, R.H. and 570072
H. Barnes (1957)
Deep-Sea Res., 4:116-9
Television echo-sounder observations
of midwater sound scatterers

Simultaneous observations with echosounders and underwater television have been made both in and out of deep scattering layers. The type of echo record and its relation to the number of fish scattering the sound was observed.

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Baerends, G.P. (1957) Baker, A. de C. (1957) 570073 570076 In "The Physiology of Fishes". Vol. II. Deep-Sea Rcs., 4:126-9 Behaviour. Edited by M.E. Brown, Academic Underwater photographs for the study of Press Inc., Publishers, New York, pp. 229-69 cccanic squid The ethological analysis of fish behaviour A technique for photographing squid at great depths has been developed, which allows the species and size to be determined. Those photographed so far appear to be the same species as are commonly seen at the surface. FAO MF | FAO:tl M Bahamonde, N.N. (1957) Balakrishnan, V. (1957) 570074 570077 Invest.zool.chil., 3:119-21 Curr.Sci., 26:57-8 Sobre la distribución geográfica de Occurrence of larvae and young mackerel Lysiosquilla polydactyla Von Martens, 1881 (Rastrelliger canagurta Cuvier) off (Crustacea, Stomatopoda) Vizhinjam, near Trivandrum (Lett) (On the geographic distribution of L. polydactyla) Catches made 1955 and 1956 show spawning It is extended from Hoste Island, Tierra time and place, and evidence of growth del Fuego far north to Maullin, near of young mackerel Chiloe Island. FiB:hr FAO:sjh M (1.957)Bainbridge, R. (1957) Balarama Murty, C. 570075 Curr. Sci., 26:80 Biol.Rev., 32:91-115 Water-masses of the Western Central Bay Size, shape and density of marine phytoplankton concentrations of Bengal during November Reviews data obtained from surface observations; intensive sampling with automatic recorders; discusses the role that might be played by wind-induced water movement in shaping the observed patterns of distribution.

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570082 Ballantine, D., and 570079 Bard, J. (1957) Bull.franc.Piscic., 29:136-46 B.C. Abbott (1957) J.gcn.Microbiol. (Symposium on plankton), Le développement, l'évolution et l'avenir 16:274-81 de la pisciculture au Cameroun (The Toxic marine flagellates: their development, evolution and future of fishoccurrence and physiological effects on culture in the Cameroons) animals A review of fishculture practices in World distribution of marine "red tides", the Cameroons. their economic importance (damage), and the physiological effects of Gymnodinium veneficum on higher organisms. FiB:tl M FAO:hr Banarescu, P. (1957) Barnard, J.L. and 570083 570080 Bul. Inst. Cerc. piscic. Roman., 16(2):36-45 D.J. Reish (1957) Science, 125(3241):236 Raspindirea si rolul biologic al guvizilor din complexul Razelm First discovery of marine wood-boring (Distribution and biological role of copepods gobies in the Razelm lagoon complex). Ru Fr Five species of wood-boring harpacticoid copepods belonging to the genera Tisbe, Significance of Gobius syrman, G. fluvia-Amphiascus, and an unknown genus were tilis, Pomatoschistus microps leopardinus isolated from test blocks in California. and other spp., as food of larger fish, especially "sandres". . FAO: sjh FAO:hr Barnes, H. Barca, Gh. (1957) (1957) 570084 570081 Oikos, 8:1-15 Agro-Silvica de Stat, Bucuresti, 550 p. Hidroamelioratii piscicole (Hydro-The northern limits of Balanus balanoides (L.) graphic improvement in fisheries) The northern limits of this and other barnacles, and also some littoral molluscs, may be correlated with the summer limits of the ice pack, the effect

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of the latter being indirect through severity of conditions and the time available for nauplius release and

570085 Barnes H. and Barsukov, V.V. (1957) 570088 G.H. Hasle (1957) Vop. Ikhtiol., 8:28-50 Nytt.Mag.Bot., 5:113-23 Raspredelenie zubatok (Anarhichas lupus, A statistical examination of the A. minor i A. latifrons) v Barentsevom distribution of some species of dino-(Distribution of the dogfish (Anarhichas lupus, A. minor and A. latifrons) in the Barents Sea) flagellates in the polluted inner Oslo Fjord A statistical analysis of the numbers Analysis of statistics of catch (absolutely and per unit effort) of of dinoflagellates in collections taken under varying conditions in the these species by months, locality and polluted Oslo Fjord in July 1948. The depth, with data on size and other variability of samples at a single biological characteristics in an station and over wide areas with respect investigation of reproduction and to several species is considered. migration. M FAO:tl M FAO:glk 570089 Barrett, P.H. (1957) 570086 Bartlett, M.S. (1957) Limnol.Oceanogr., 2:287-94 Biometrika, 44(1-2):27-42 Potassium concentrations in fortilized On theoretical models for competitive and predatory biological systems trout lakes A review of the mathematical theories. Describes experiments in Michigan (USA) lakes designed to determine if biological, productivity could be increased by application of commercial fertilizers. MF \mathbb{F} FAO:sjh HPowad 570090 570087 Batham, E.J. (1957) Barrington, E.J.W. (1957) Aust.J.Sci., 19(3):87-91 J. Mar. biol. Ass. U.K., 36(1):1-16 History of the Portobello Marine The distribution and significance of organically bound iodine in the ascidian Biological Station Ciona intestinalis Linnaeus Some features of the organization of the endostyle of Ciona intestinalis are described followed by a description of the distribution of iodine within the pharynx, intestine and testes, and a comparison of the endostyle of Ciona and that of the ammocoete. M Haihr M

Bauer, O.N. (1957) Vop.Ikhtiol., 8:179-87

570091 Bocker, W.A. (1957)

Epizooticheskoe sostoianie ryb v prudovykh Computing mortality in experiments with khoziaistvakh SSSR i ocherednye zadachi bor'by s parazitarnymi zabolevaniiami v (The epizootic condition of fish in pond economy of U.S.S.R. and alternative problems in the prevention of parasitic diseases among them)

Tabulation of the diseases of carp observed in farm ponds in various regions | investigated. of U.S.S.R. with discussion of outbreaks and control measures adopted and recommendations for a campaign.

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animals

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Beadle, L.C. (1957) 570092 Annual Review of Physiology, 329-58 Osmotic and ionic regulation in aquatic

Boliacv, G.M. and

Biometrics, 13:549-50

irrelevant deaths

570095

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P.V. Ushakov (1957) C.R. Acad. Sci. U.R.S.S., 112:137-40 (Cortain regularities in the quantitative distribution of bottom fauna in Antarctic waters).

Abstract of paper presented at Meeting

Institute of Biological Science, 27-28/8/57;

notes on arithmetic method of correcting experimental mortality data for deaths

of Biometric Society and American

due to causes other than those being

Quantitative distribution of benthos with the depth; the quantitative occurrence of different taxonomical groups within different depth ranges in the Antarctic , and comparison with the northern seas of Russia.

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Becker, P. (1957) 570093 Nature, Lond., 180:559-60 Changes in response to light stimuli of the larvae of Culicoides circumscriptus

Behaviour with respect to light varies with hunger. This is useful in determining types of material on which larvae feed.

Bollis, E.D. (1957) 570096 Copoia, (2):85-9

The effects of temperature on salientians breeding calls

· A study of the relations of air and water temperature with the number of calls produced in a given time interval (frequency of call) and to the lengths of the individual calls of Pseudacris nigrita triscriata, P. clarki, P. streckori, and Bufo terrestris charlesmithi.

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Bennett, G.W. and 570097 Ben-Tuvia, A. (1957) 570100 W.F. Childers (1957) Fish.Bull., Haifa, (14):18-9 J. Wildlife Mgmt., 21(4):414-24 (Meet your fish). The smallmouth bass, Micropterus dolomicui, in warm-water ponds Figures of and notes on Trachurus trachurus, Siganus rivulatus, Dicontrar-Growth, mortality and reproduction in chus punctatus, Sarpa salfa, Hippocampu: 12 representative ponds. Population guttulatus, Nerophis maculatus and Stromateus fiatola. sizes, feeding habits. FAO:sjh SJH: sjh М 570101 Bennett, M.F., J. Shriner 570098 Ben-Tuvia, A. (1957) Fish.Bull., Haifa, (11):16-7 and R.A. Brown (1957) Biol.Bull.Wood's Hole, 112(3):267-75 (Heet your fish). Persistent tidal cycles of spontaneous motor activity in the fiddler crab, Uca Illustrations of and short notes on Caesiomorus glaucus, Rhinobatus comiculus, pugnax Coris julis, Pleroplatea altavela, Argen-Laboratory study on the frequency and tina sphyranca, Scyliorhinus canicula, Oxynotus centrine, Chlorophthalmus intensity of spontaneous locomotor agassizi and Capros aper. activity of the crab. M FAO: tl SJH: sjh Ben-Tuvia, A. (1957) 570102 570099 Benoit, R.J. (1957) Fish.Bull., Haifa, (13):18-22 Limnol.Oceanugr., 2:233-40 (Meet your fish). Preliminary observations on cobalt and vitamin B₁₂ in fresh water Illustrations with short notes on Myliobatis, Squatina, Merolepis, Strongy-The cobalt, copper, and iron contents of a vertical series of water samples from lura, Echelus, Syngnathus Murenophis. Linsley Pond are given. The proportions of the total cobalt tied up in vitamin B₁₂ in the epi- and hypolimnion are estimated. HR: tl M SJHssjh

Berkeley, E. and C. Berkeley (1957) 570106 Ben-Yami, M. (1957) 570103 Fish.Bull., Haifa, (13):22-4 Can. J. Zool., 35:573-8 (Construction of the Italian trawl net On some pelagic polychaeta from the northeast Pacific north of latitude 40°N. and from machine-made webbing). east of longitude 175°W. Illustrated account. Two species (Otopsis longipes Ditlevsen and Epidiopatra hupforiana Augener) new to the Pacific Ocean and four new to it north of latitude 40°N. (Phalocrophorus pictus Greef, Plotohelmis tenuis Apstein, Tomopteris cavallii Rosa, and Travisiopsis lobifera Levinsen) are recorded. Four others, one of which (Typhloscolex mulleri Busch) was taken at a more northerly latitude in the northeast Pacific than M SJH: sjh proviously, are also listed. FAO:hr M 570104 Berkson, J. (1957) 570107 Ben-Yami, M. (1957) Fish.Bull., Haifa, (14):4-9 Biometrics, 13(1):28-34 The International Fishing Gear Congress Tables for the maximum likelihood estimate in Hamburg). of the logistic function I_{W} A report. Gives theory and tables for fitting logistic curve to observed data of bioassay, etc. MF SJH:sjh MF SJH:sjh 570105 Bernard, F. (1957) 570108 Benyamini, D. (1957) Fish.Bull., Haifa, (14):31-2 Bull. Soc. Hist. nat. Afr. N., 48(5-6): 378-84 (An experiment in enlarging the opening of Présence dans la Mer Morte (Israël) d'un the trawl net on the FMV DROR). $\mathbb{I}_{\mathbb{W}}$ plancton unicellulaire de type méditerranéen (Presence in the Dead Sea (Israel) of a unicellular planktonic Incl. ill. of gear. organism of the Mediterranean type) Water samples from the western shores of the Dead Sea were found very rich in Coccolithus fragilis and Exuviella marina prodominant in the Mediterranean. WH ojh М :hr M

Bornhard, M. (1957) 570109 Pubbl.Staz.zool.Napoli, 29:80-95 Culture of sea urchins, Arbacia lixula, in artificial and natural sea water by means of ion exchange and chelating agents	Berthois, L. and 570112 R. Brenot (1957) Rev.Trav.Inst.Fôches marit., 21:425-7 Note préliminaire sur la topographie du talus du plateau continental dans le golfe de Gascogne (Preliminary note on the topography of the talus of the continental shelf in the Gulf of Gascony)
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Berrill, N.J. (1957) 570110 Sci.Amer., 197(6):118-25 The indestructibel Hydra An illustrated report on recent research on regeneration of this coelenterata.	Berthois, L. and 570113 R. Brenot (1957) Rev.Trav.Inst.Pêches marit., 21:431-4 Topographic sous-marine de l'"Outer Silver Pit" et du "Markhams Hole" Lat.N.54° Long.E.Gr.2° (Submarine topography of the "Outer Silver Pit" and of "Markhams Hole" Lat.N.54° Long.E.Gr.2°) Comparison of existing charts with results of an echo-sounding survey and presentation of a new chart.
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Berrill, N.J. and 570111 J. Borrill (1957) Dodd, Mead, New York, 305 pp. Questions answered about the seashore	Berzinš, B. (1957) 570114 Skr.sverig.FiskFören., Arsskrift 1956,: 77-80 Märkning av gäddor med fenklippning. 4 (Marking fich by fin-clipping). En Review of the method with special emphasis on fin regeneration.
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Borzinš, B. (1957) Svensk FiskTidskr., 66(12):185-96 Fiskev&rd och nya fiskarter mann_ement and new fish species) Review of the transplantation of fish species in various parts of world and the results of these transplantations.	(Fisheries foreign	Best, E.A. (1957) Calif.Fish Game, 43(1):97-8 Recent occurrences of the red broamophycis marginata (Ayres), i California waters List of specimens, with positions dates, and some measurements.	.n
FAO:tl	MF	HR: sjh	M
Berzins, B. (1957) Svensk FiskTidskr., 66:28-31 Märkning av gäddor med fenklippn: (Tagging pikes by cutting the fins Investigations on the regenerations.	3)	Best, E.A. (1957) Calif.Fish Game, 43(2):147 Tagged dover sole (Microstomus pa at liberty six years Fish with Peterson-disk tag recap within 25 miles of position relea 6/50 of month of Mad River, Calif	tured sod in
FAO:tl	Ē,	WAD:sjh	М .
Berzins, B. (1957) Vandringsfisk.Medd., 2:10 pp. (Investigations on natural fish plane) No. 9. On the loss of fish and signarding of ponds). Sv Results of the investigation on sof fish from the ponds due to fish cating birds. Half-monthly value temperature, oxygen, iron, KIMn Oquensumption, plankton, etc., are given for the ponds.	the loss sh- es on pH,	Bethke, W. (1957) Idaho Wildl.Rev., 10(2):6-7 Distribution and release of hatch A popular account of methods util Idaho with special reference to t	ized in
TL:tl	F	WAD:wad	F

Bhattacharyya, R.N. (1957) 570121

Mar.Res., (3):15 p.

The food and feeding habits of larval and

post-larval herring in the northern North

Stomachs and intestines of 2521 larval and post-larval herring taken in the Moray Firth, Cromarty and Fair Isle areas were examined from collections made in April, August, September, October and November, 1952 Light plays a very important part in the feeding, and larval and post-larval herring feed very little after darkness and start feed ng with daybreak. Attempt made to estimate rate of digestion of copepods, copepod eggs, lamellibranch and gastropod larvao.

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Bhimachar, B.S. (1957) Curr.Sci., 26:208 Prof. Basant Kumar Das

570124

An obituary. Worked on air-breathing fishes and was associated with organization of Hyderabad Fisheries Department.

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Bhattacharyya, R.N. (1957) 570122 Proc.nat.Inst.Sci.India, 23(3)A:191-8 Wave resistance in deep water due to the accelerated motion of a pressure system

The wave resistance of the waves produced by the uniformly accelerated motion of a pressure system over the undisturbed surface of deep water has been worked out theoretically. The resistance has been divided into three components, one representing the direct effect of acceleration and two others the uniform motion of a pressure system.

Bhimachar, B.S., S.K. Banerji 570125 and G. Venkataraman (1957) Indian J.Fish., 4(1):1-19 A study of the variability in the fish catches taken by successive hauls in the inshore waters off Calicut

Analysis of the variance of numbers in catches between hauls, zones and dates for all hauls, and between dates, hauls and species for each of the four zones.

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Bhavanarayana, P.V. and 570123
E.C. La Fond (1957)
Indian J.Fish., 4(1):75-9
On the replenishment of some plant
nutrients during the upwelling period
on the east coast off India

Discussion of silicate and phosphate profiles with relation to wind movement and water circulation.

Bidwell, R.G.S. (1957) 570126

Canad.J.Res.(Bot.), 35(6):945-50

Photosynthesis and metabolism of marine algae - I. Photosynthesis of two marine flagellates compared with Chlorella

The products of photosynthesis of two marine flagellates have been examined and compared with those of <u>Chlorella pyrenoidosa</u> with the use of radioactive carbon and chromatographic techniques.

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Billings, W.D. (1957) 570130 Biogler, P.(Comp.) (1957) 570127 Annu.Rev.Pl.Physiol., 8:375-92 Fischwar.u.Feinkostindustr., 29(8):129-30 Physiological ecology Jahreszeitliches Vorkommen des Herings im (Seasonal appearance Nord-Atlantik of herrings in the North Atlantic) Stages of maturity and size composition of Clupea harengus from January to December. MF FAO: hr MBirkett, L. (1957)570128 Bieri, R. (1957) Fisheries Laboratory Lowestoft, Mimeo, 4 p. Pacif.Sci., 11(3):255-64 Certain regularities in the quantitative The Chactognath fauna off Poru in 1941 distribution of bottom fauna in Antarctic, waters Describes the distribution of the following species in the surface water English translation of 570095. of the Peru coastal current: Sagitta sp. S. bedoti, S. californica, S. forex, S. neglecta, S. tenuis, S. regularis, S. robusta, S. enflata, S. hexaptera, S. lyra, S. minima, S. pacifica, Krohnitta pacifica and Ptorosagitta draco. FiB M FAO:hr 570132 Bigelow, H.R. and W.C. Schroeder (1957) 570129 Birkett, L. (1957) Fisheries Laboratory Lowestoft, Mimeo, 6 p. Bull.Mus.comp.ZoolHarv., 117(1):150 p. Interstitial waters of the Pacific Ocean A study of the sharks of the suborder and adjoining seas Squaloidea Roview of systematics of this group, with English translation of 581887. diagnostic keys.

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Birkett, L. (1957) Birshtoin, Ia.A. (1957) 570133 570136 Fisheries Laboratory Lowestoft, Mimeo 2 p. Zool.Zh., 36(7):961-83 On the fecundity of the Barents Sea O nekotorykh osobennostiakh ul'traabissalcapelin noi fauny na primere roda Storthyngura (Crustacea Isopoda Asellota) (Certain English translation of 581889. peculiarities of the ultra-abyssal fauna, as for example the genus Storthyngura (Crustacea Isopoda Asellota) Description of 6 new species of the genus Storthyngura from the Kurile-Kamchatka, Japan and Alcutian trenches. FiB FAO:tl M Birkhoff, C. (1957) Bishop, M.W.H. and 570137 Bremerhaven, Nordwestdeutscher Verlag C.R. Austin (1957) Ditzen, 166 p. Endeavour, 16:137-50 Seefischerei in Gegenwart und Zukunft. Mammalian spermatozoa Probleme, Methoden und Fahrzeuge der Weltfischerei mit fischereitechn. Includes reproduction of Retzius! Lexicon (Sea fisheries at present illustration of spermatozoon of pilot and in the future. Problems, methods whale, Globiocephalus melaena. and vessels of the world fisheries with technological dictionary) FAO M GLK: sih M Bishop, M.W.H. and 570138 Birman, I.B. (1957) 570135 Vop. Ikhtiol., 8:3-7 D.J. Crisp (1957)Kuro-sio i chislennost' amurskoi osennci Nature, Lond., 179:482-3 kety (The Kuroshio and the quantity The Australasian barnacle, Elminius of oceanic Amur salmon) modestus, in France Elminius modestus is established over Discussion of the catch of this species, two large areas of the French coast supported by reference to the catch of extending from the Belgian frontier sardines, in relation to cyclical to Cap de la Hague and from the changes in average level of water estuary of the Yandy to the Rode de Brest. temperature. GLK:hr FAO:glk

Bishop, M.W.H. et al. (1957) 570139 Bull.Inst.oceanogr.Monaco, 1099:1-12 Sur l'écologie des Cirripèdes de la côte atlantique française (On the ecology of the Cirripeds of the French Atlantic coast)

A study of distribution and abundance of Elminus modestus, Chthamalus stellatus, Balanus balanoides, B. improvisus, B. crenatus, B. eburneus, B. amphitrite var. denticulata, B. perforatus, V. strömia, Pollicipos cormucopiae.

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Black, E.C. (1957)

Salvelinus namaycush

J.Fish.Res.Bd Canada, 14:645-9

Alterations in the blood level of lactic

acid in certain salmonoid fishes follow-

ing muscular activity - II. Lake trout,

During the summer of 1954, 15-year-old

cush were subjected to 15 minutes of

severe muscular exercise at the trout

hatchery at Summerland, B.C. Following

exercise, fish were allowed to recover for various intervals up to 24 hours. Blood samples were taken and analyzed.

hatchery-raised trout, Salvelinus namay-

F

570142

Bishop, Y. et al. (1957) 570140 Bull.Fish.Res.Bd Can., 110:207 p. Index and list of titles, publications of the Fisheries Research Board of Canada 1901-1954

Black, E.C. (1957) 570143 Rev. canad. Biol., 16(4): 468-9 Mortality in two-year old Sockeye salmon, Oncorhyncus nerka, following severe muscular exercise

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Black, E.C. (1957) 570141 J.Fish.Ros.Bd Canada, 14(2):117-34 Alterations in the blood level of lactic acid in cortain salmonoid fishes following muscular activity - I. Kamloops trout, Salmo gairdneri

The present investigation was undertaken in lorder to describe the recovery pattern from ; the clevated level of lactic acid in the blood. Observations were also made upon the blood glucose level during recovery. In addition, the rate of increase of the blood lactic acid level with exercise; the effect of moderate exercise; the effect of varying oxygen levels in the respired water; and a proliminary study on the effect of temporature on increased lactic acid level in the blood. :GLK:glk

570144

Black, E.C. and I. Barrett (1957) Canad.Fish Cult., 20:13-24 Increase in levels of lactic acid in the blood of cutthroat and steelhead trout following handling and live transportation

Experiments with Salmo clarki and S. gairdnori.

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Blackburn, M. (1957) 570145 Blair, A.A. (1957)Aust. J. Mar. Freshw. Res., 8:29-54 J. Fish. Res. Bd Canada, 14(2):135-40 The relation between the food of the Salmon tagging at Francis Harbour Bight; Australian barracouta, Thyrsites atun (Euphrasen), and recent fluctuations in the fisheries Tagging of Salmo salar. 10,000 stomach analyses; geographical variations; relation of feeding to availability to coastal fishermen. GLK:sjh M GLK:glk M Blacker, R.W. (1957) 570146 Blair, W.F. (1957) 570149 Fish.Invest., Lond., Scr.II., 20(10) In "Vortebrates of the United States" by Benthic animals as indicators of hydro-W.F. Blair et al. McGraw-Hill Book graphic conditions and climatic change Company, Inc., pp. 615-774 in Svalbard waters Part VI. Mammals A brief account is given of the past Includes aquatic forms. bonthos work in the area (1878-1931). Detailed charts of the distribution of the selected species from past and present records are given, and the differences between the past and present distribution! of the indicator species have been used to show how hydrographic conditions have changed in recent years.

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Blair, A.A. (1957) 570147 J.Fish.Res.Bd Canada, 14(2):141-4 Salmon tagging at Cape Charles, Labrador

Tagging of Salmo salar.

Blair, W.F. et al. (1957) 570150

McGraw-Hill Book Company, Inc., 819 p.

Vertebrates of the United States

A manual for the identification of all known vertebrates through taxonomic keys, check lists, descriptions, and ranges. Geographic coverage is limited to the continental United States and its adjacent waters excluding marine fishes and turtles.

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Bleakney, S. (1957) Copeia, (2):141-2 Blanchard, D.C. and 570151 570154 (1957)A.H. Woodcock Tellus, 9(2):145-58 The egg-laying habits of the salamander, Bubble formation and modification in the Ambystoma jeffersonianum sea and its meteorological significance A critical review of W.T. Stille (1954, Copeia (4):300), with account of observations on the egg-laying phenomenon It is believed that the vast majority of the airborne salt nuclei arise from bursting bubbles at the air-sea water of this sp. in Canada. interface. Four natural mochanisms for the production of these bubbles have been studied. HR:efa FAO: tl F 570152 Bleakney, S. (1957) Copoia, (2):143 Blanke, W. (1957) 570155 Krögers Buchdruckerei, Hamburg · Blankenese, 600 p. A snapping turtle, Chelydra scrpentina scrpentina, containing eighty-three eggs Die Secfischerei Nordwest-Europas (Sea fisheries of Northwestern Europe) Records specimen taken in Quebec with 83 fully formed eggs in oviducts. M HR :efa Blaxter, J.H.S. (1957) 570153 Bloakney, S. and 570156 Mar. Ros., (1):15 p. F. Cook (1957) Copcia, (2):142-3 Herring Rearing-III. The effect of Additional records of the four-toed temperature and other factors on myotome salamander, Hemidactylium scutatum, from counts Nova Scotia Counts of myotomes have been made on Content as per title. herring larvae of different parentage and 'race', hatched cut in the laboratory at different incubation temperatures ranging from 5.1°C to 14°68°C. Counts

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Bleakney, S. and F. Cook (1957) 570157 Blum, J.L. (1957) 570160 Copeia, (2):143 Hydrobiology, 9(4):361-405 Two erythristic Plethodon cincreus from An ecological study of the algae of the Nova Scotia Saline River, Michigan Reports capture of two adult specimens Quantitative and qualitative records for of this color phase. 1951-53 of physico-chemical environmental factors relating to algal communities growth in relation to zones of minor pollution. HR:efa F FAO:sjh F Blewitt, M. (1957) 570158 Blythe, H.J. (1957) 570161 MacGibbon and Kec, London 1957, 168 p. Chem. Engng Min. Rev., 49(8):59-62 Surveys of the seas - A brief history Safe disposal of radioactive wastes of British hydrography A selection of manuscripts (working maps) of the coastal hydrographic surveys, giving an historical review and development of the methods of surveying and mapping the coasts. FAO:tl M MF Blower, J.G. (1957) 570159 Boden, B.P. and 570162 E.M. Kampa (1957) Nature, Lond., 180:560 Feeding habits of a marine centipede Pacif.Sci., 11:229-35 Records of bioluminescence in the ocean Scolioplanes maritimus observed feeding Account of observations on bioluminescence at night on Balanus balanoides and in deep water and effect of moonlight on Littorina saxatilis. vertical distribution of luminescent organisms off Oahu and San Diego. FAO:efa IIM GLK: jae

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Bondi, A., A. Spandorf and R. Calmi (1957) Bamidgeh, 9(1):13-8 The nutritive value of various fe carp Results of comparative analysis o and faeces of 3 specimens of carp aquarium experiments are discusse	f feed in	Boroughs, H., S.J. Townsley, and R.W. Hiatt Limnol.Oceanogr., 2(1):28-32 The metabolism of radionuclimarine organisms. III. The ucalcium-45 in solution by ma The uptake of calcium-45 dissea water, by Tilapia mossam the distribution of this elevarious tissues of the fish, measured. These results are those of a similar experimentadiostrontium.	des by ptake of rine fish solved in bica, and ment in the were compared with
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Bondy, P.K., G.V. Upton and G.E. Pickford (1957) Nature, Lond., 179(4574):1354-5 Demonstration of cortisol in fish Demonstration, by paper chromatog of a steroid in the plasma of Cyp carpio and Pseudopleuronectes ame	raphy, rinus	Borrel, A. (1957) L'Institut des hautes études 85 p. Les pêches sur la côte septer Tunisie (Fisheries off the coast of Tunisia) Describes the general conditi fisheries, their evolution, a different fisheries.	ntrionale de ne northern
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Boycott, B.B. (1957) 570187 Brannon, H.R. et al. (1957) New Sci., 2(47):12-3 Trans. Amer. geophys. Un., 38(5):643-50 Radiocarbon evidence on the dilution of An octopus lays eggs at London Zoo atmospheric and occanic carbon by carbon from fossil fuels Short illustrated review of reproduction behaviour and ecology of octopi, Estimations of the dilution of atmospheric occurrence and egg-deposition in aquaria, carbon dioxide by carbon dioxide from occasioned by recent observations of fossil fuels, and the fractional part of this event in Octopus vulgaris. Hatching the atmospheric carbon dioxide entering has yet to be observed. the ocean. Using those data, information is sought on mixing times in the ocean. FAO: tl M FAO: sjh Boyd, A.W. (1957) 570188 Brattström, H. (1957) 570191 Brit.Birds, 50:253-63 Publ.biol.Sta., Bergen, 19:10 p. Sewage farms as bird habitats. Branchiocerianthus norvegicus n. sp. from the Hardangerfjord, western Norway Ecological notes on the various habitats afforded by sewage farms, and on the Description of a new hydroid. preferences shown by different species. (Includes a section on Nottingham Sewage Farm by Dr. R.J. Raines). F :jae GLK:tl M Bragg, N.A. (1957) 570189 Brebion, G., J. Chopin 570192 and F. Humbert (1957) Copeia, (1):36-9 Chim.et Industr., 77:1110-6 Variation in colors and color patterns in tadpoles in Oklahoma Toxicity to fish (minnows) of some phenolic derivatives formed by the decomposition Tadpoles of most species tend genetically of lignin in paper pulp factories to have a characteristic coloration which may, however, be slightly or greatly modified by environmental influence. HR:hr

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Bressau, S. (1957) 5 Küste, (1):64-102 Abrasion, Transport, und Sedimentation der Beltsee (Abrasion, transport sedimentation in the Belt-Sea)	Bridges, W., J.W. Atz and E.R. Sanborn (1957) New York, 62 p. Guide and historical souvenir of Sof the New York Aquarium	570197 tage I
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Bretschneider, C.L. (1957) 5 Paper presented at the Thirty-Eighth Annual Meeting, Washington, D.C., April 29 - May 2, 1957 Joint distribution of wave heights at lengths	Briggs, J.C. and D.K. Caldwell (1957) Bull.Fla.St.Mus., 2(4):43-51 Acanthurus randalli, a new surgeon from the Gulf of Mexico Describes the species and analyses relationships.	1
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British Weed Control Broch, H. (1957) 570199 Council (1957)Nature, Lond., 179:1356 British Weed Control Council, London, The northern octocoral, Paragorgia arborea (L.), in sub-Antarctic waters 163 pp. Weed control handbook, 1957 Establishes this as a bipolar species Includes short section (p. 86-7) on the at present. control of aquatic weeds and algae; detailed tables of properties of

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species index.

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Broad, A.C. (1957) 570200 Biol. Bull., Wood's Hole, 112:144-70 Larval development of Palaemonetes pugio Holthuis

herbicides, glossary of terms and a

Description of larval development of this sp., and its comparison with Palaemonetes vulgaris (Say). Variation in number and structure of larval intermolts, found in development of both spp., is mentioned.

Broecker, W.S. (1957) 570203 Paper presented at the Thirty-Eighth Annual Meeting, Washington, D.C., April 29 - May 2, 1957 Variations in the C14/C12 ratio of Atlantic Ocean surface water

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Broad, A.C. (1957) 570201 Biol.Bull., Wood's Hole, 112:162-70 The relationship between diet and larval development of Palaemonetes

Investigation of the qualitative food requirement and molting of Palaemonetes pugio and P. vulgaris. It was found that these larvae need food which includes animal tissue. The frequency of molting and the rate of development varied according to the quantity of food avnilrole.

Broecker, W.S., R.D. Gorard 570204 and B.C. Heezon (1957)Paper presented at the Thirty-Eighth Annual Meeting, Vasaington, D.C., April 29 - May 2, 1957 Deep water circulation in the Atlantic Occan

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Brongersma-Sanders, M. (1957) 570205 Verh.Akad.Wet.Amst., (b), 50(6)

On the desirability of a research into certain phenomena in the region of upwelling water along the coast of South West Africa

Brown, M.E. (1957) 570208;
Academic Press, Inc., New York, 526 p.
The physiology of fishes, 2. Behavior

Consists of authoritative reviews of the present state of knowledge of various aspects of fish physiology. Gaps in knowledge and possible fruitful lines for further research are indicated. Individual chapters by L.R. Aronson, G.P. Bacrends, J.R. Brett, H.O. Bull, P. Doudoroff, D.L. Fox, M. Gordon, E. Nowton Harvey, A.D. Hasler, E.G. Hoalcy, F.R. Harden Jonos, R.D. Keynes, O. Lowenstein, J.M. Odiorne.

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Brown, H.S., J. Bonner 570206 and J. Weir (1957)

New York, Viking Press, 193 p.

The next hundred years: man's natural and technological resources; a discussion prepared by leaders of American industry

General discussion of the prospects of man being able to develop has technology of resource exploitation at a rate to match the rate of population increase, concluding that this will depend on the speed with which he develops his techniques of exploiting renewable resources; includes a brief reference to the possibilities offered by the sea.

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Brown, S.G. (1957) 570209

Nature Lond., 179(4573):1287

Migrations of humpback whales

A note on the studies of the movements of the humpback whale (Megaptera novaeangliae) in New Zealand waters.

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Brown, M.E. (1957) 570207 <u>Academic Press, Inc., New York</u>, 447 p. The physiology of fishes, 1. Motabolism

Consists of authoritative reviews of the present state of knowledge of various aspects of fish physiology. Gaps in knowledge and possible fruitful lines for further research are indicated. Individual chapters by F.E. J. Fry, G.S. Carter, J.C. Mott, E.J.W. Barrington, V.S. Black, J. Van Oosten, W.S. Hoar, S. Smith, M.E. Brown, R.M. Love, annotated in Curr. Bibliogr. Fish. Sci., 1(5) which see.

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A.C. Alcala (1957)
Copeia, (1):39-41
Viability of lizard eggs exposed to sea water

Eggs of Cosymbatus platyurus, Gohyra mutilata and Hemidactylus fronatus, might feasibly survive for at least 11 days, eggs of Dasia smaragdina only from 3 to 5 days.

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localisation systems in French hydroseasonal and diurnal changes at a station forty miles east of Miami graphy) Description of equipment and operations. This is a survey of the standing crop of ' plankton in the Florida Current, its vertical, seasonal and diurnal changes, and of relevant environmental conditions. The top 100 meters is considered to be the euphotic zone. Details are given for ; siphonopheres, chaetognaths, copepods, cuphausids, pteropods and young fish. FAO:glk M FAO:glk M Bruschek, E. (1957) Buchanan, J.B. (1957) 570212 570215 Nature, Lond., 179(4560):634-3 Z.Fisch., 5:289-94 Benthic fauna of the continental edge off Eine Versuchsanlage zur Beobachtung von Fischen in fliessendem Wasser Accra, Ghana experimental plant for the observation of fish in running water) Short description of one epifaunal and one infaunal community on muddy sand. Description of an oval runway to observe Both communities, are identical with fish behaviour. The water is circulated those occurring in Western Mediterranean. by a propeller placed in the runway. FAO: tl GLK:tl M Bruun, A.F. (1957) Sci.Amor., 197(5):50-7 570213 Bucksch, R. (1957) 570216 Ost. Wasserw., 9:75-7 Legal problems of international co-Animals of the abyss operation in the protection of streams Short account, with numerous illustrations, of the GALATHEA expedition.

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Bsharah, L. (1957)

Bull.Mar.Sci.Gulf Caribb., 7(3):201-51 Plankton of the Florida current. V.

Environmental conditions, standing crop,

570214

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Brunel, M.A.

(1957)

Les systèmes de radiolocalisation dans

Int.hydr.Rev., 34(2):131-7

l'hydrographie française

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Budd, J. (1957) 570217 | Canad.Fish Cult., 20:25-8 | Introduction of the hybrid between the eastern brook trout and lake trout into the Great Lakes

Describes the first known introduction (1954) of <u>Salvelinus fontinalis</u> and <u>S. namayoush</u> into these waters (US and Canadian) and subsequent recoveries.

Bull, H.O. (1957) 570220
In "The Physiology of Fishes". Vol.II.
Behaviour. Edited by M.E. Brown,
Academic Press Inc., Publishers,
New York, pp. 211-28
Part I. Conditioned responses

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Bückmann, A. and G. Hempel (1957) 570218

Holgoländ.wiss.Mecresunters., 6(1):52-70 Untersuchungen an der Heringslarvenbevölkerung der Innenjade (Investigations on the population of herring fry in the Jade estuary)

herring fry in the Jade estuary)

Investigations of the larvae place of origin. Correlations between the weight and length, water temperature, and

speed of growth with the number of

Bullo, A. (1957) 570221

Agricoltura d. Venezie, 11:5-21

Noi territori vallivi del Basso Polesine, vallicoltura o agricoltura? (In the valleys of Low Polesine, fishculture or agriculture?)

Discusses the difficulties and economic problems presented by the Ministry of Agriculture. Plans for transforming the saltwater ponds into agricultural fields.

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Buedeler, W. (1957) UNESCO, 1957, 66 p. 570219

L'année géophysique internationale (The international geophysical year)

A general illustrated account of the various projects, with short reference to oceanography in the chapter on the exploration of the earth.

Bumpus, D.F. (1957) Spec. sci. Rep. U.S. Fisl 570222

Spec.sci.Rep.U.S.Fish Wildl.Serv., (214):153 p.

Surface water temperature along Atlantic and Gulf coasts of the United States

Tabulations of monthly and annual mean surface water temperatures recorded since 1878.

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Burdick, G.E. et al. (1957)(1957)570223 Burmister, C.A. Int.hydr.Rev., 34(2):121-30 N.Y. Fish Game J., 4(1):92-101 L'électronique en hydrographie. I. Lethal oxygen concentrations for yellow Quelle est la profondeur de l'océan? (Electronics on hydrography. I. What is the depth of the ocean?) Historical review with brief technical details of certain types of equipment. \mathbb{F} FAO:glk M Burkenroad, M.D. (1957) Burrows, R.E. (1957) 570224 570227 Progr.Fish.Cult., 19(2):75 Ecology, 38:164-5 Intensity of setting of starfish in Acceleration of spawning of adult Long Island Sound in relation to salmon fluctuations of the stock of adult starfish and in the setting of oysters A brief report of experiments conducted and preliminary results obtained on Discusses evidence on this relation in the acceleration of spawning of Oncorhynchus nerka by exposure to recent years. periods of light. FAO:sjh FAO:efa MF Bursche, E.M. (1957) Burkov, V.A. et al. (1957) 570225 . 570228 Trud. Inst. Okcanol., 24:5 Z.Fisch., 5:211-30 Techniques of hydrographic work in the Die Makraphytenvegetation thüringischer Teiche und ihre fischereiliche open sea). Ru Bewertung (The macrophyte vegetation of Thuringian ponds and its evaluation from the fishery point of view) Description of the floral composition of the vegetation in ponds.

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Burt, W.V. and J. Queen (1957) 570229 Science, 126:973-4 Tidal overmixing in estuaries

Discusses the processes of eddy diffusion due to tidal currents in the Coos Bay and river estuary in Oregon coast.

Busnita, Th. et al. (1957) 570232

Bul.Inst.Cerc.piscic.Roman., 16(2):5-19

Primele incercari de aclimatizare a coregonilor in apele R.P.R. (First notes on acclimatization of coregonids in Roumanian waters). Ru Fr

Reports results of transplanting from Poland and USSR, eggs of Coregonus albula and C. lavaretus maraenoides.

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Butler, T.H. (1957)

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Busch (1957) 570230

Int.hydr.Rev., 34(2):59-63

Le "Radiolog-Atlas" appareil radioélectrique de détermination du point
pour les lèves hydrographiques
(Radiolog Atlas, a radioelectric
apparatus for point determination in

Account of the fundamental theory of the operation of this system and certain details concerning the system itself.

hydrographic surveys)

Progr.Rep.Pacif.Cst Stas, (109):16-9
The tagging of the commercial crab in the Queen Charlotte Islands region

Positions and numbers of tagged Cancer magister released and returned, 1952-56. Movements, growth; tag efficiency.

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Busch, C.W. (1957) 570231

Int.hydr.Rev., 34(1):65-7

Appareil de mesure radioélectrique pour la détermination de la position dans les lèves hydrographiques au moyen de l'echo-sondeur (Radioelectric apparatus to determine the position of hydrographic soundings by means of the echo-sounder)

Gives a brief summary of the development and principles of operation of a new aid to hydrographic work.

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Buys, M.E.L. (1957) 570234
Invest Rep. Div. Fish. S. Afr., (27):114 p.
The South African pilchard (Sardinops ocellata) - Temperature variations in the upper 50 metres in the St. Helena
Bay area, September 1950 - August 1954

Account of method to establish periodic, and therefore predictable, cycles of temperature. Analysis of charts showing the temperature at the surface and at 20 metres, and the mean integral temperature of the 0-50 metres layer on an annual, seasonal and monthly basis. Variation of these temperatures in time graphically represented and analysed by month and by season using data collected on monthly survey cruises. FAO:sjh

Cagle, F.R. (1957) In Vertebrates of the United State by W.F. Blair et al. McGraw-Hill Company, Inc., pp. 273-358 Part IV. Reptiles		Caldwell, D.K. and J.C. Briggs (1957) Bull.Fla St.Mus., 2(1):11 p. Range extensions of western North fishes with notes on some soles of genus Gymnachirus Contains range extensions of 15	of the
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Cagniard, L. (1957) Ann.Géophys., 13(2) Sur la théorie de la mésure óléo gnétique des courants marins theory of electromagnetic measur of currents)	(On the	California. Laws, statutes, etc. (1957) St.Paul, Nest Pub.Co., 374 p. West's California fish and game of 1957, Stats. 1947, c. 456, as among the 1957 regular session of the legislature	
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Cairns, J., Jr. (1957) Industr.Wastes, 2:1-5 Environment and time in fish too Discusses the toxicity of indust waste waters to fish and factors be taken into consideration when planning bio-assay tests.	trial s to	California University. Scripps Institution of Oceanography (1957) SIO Reference 57-10, 45 p. Physical and chemical data, CCOFT 5209 (MIR 41) 4-19 September 1952	cruise
twee	ir 		И

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California University. Scripps 570241 Callaway, R.J. (1957)Spec.sci.Rep.U.S.Fish Wildl.Serv., (230) Institution of Oceanography (1957)Oceanographic and meteorological SIO Reference 57-13, 43 p. observations in the northeast and Physical and chemical data, CCOFI cruise central North Pacific, July - December 5210 (MIR 42) 8-22 October 1952 1956 M M (1957) California University. Scripps 570242 Cameron, F.E. 570245 J.Fish.Res.Bd Canada, 14(2):165-202 Institution of Oceanography Some factors influencing the distribution SIO Reference 57-22, 46 p. of pelagic copepods in the Queen Physical and chemical data, CCOFI cruise Charlotte Islands area 5211 (MIR 43) 6-21 November 1952 Species taken are listed and discussed with reference to the role of temperature and distribution as determinants of distribution. Water circulation patterns are inferred from the plankton collections. M GLK:glk M 570243 Campana-Rouget, Y. (1957) Callahan, C.C. (1957) Columbus, Ohio, Dep. of Natural Bull. Inst. franc. Afr. noire, A. Sci. nat., Resources, Division of Water, 34 p. 19:417-73 Principles of water rights law in Parasites de poissons de mer ouestafricains récoltés par J. Cadenat Ohio (Parasites to west African marine fishes, collected by J. Cadenat) An account of Nemorteans collected; general account of the morphology of the sub-family Cuculaninae, followed by a discussion of the validity of different genera and cortain species and a classification of the parasites according to host. FAO:glk MF

Campbell, R.N. (1957) 570247
Freshw.Salm.Fish.Res.Ser., 14:7 p.
The effect of flooding on the growth
rate of brown trout in Loch Tummel

Scale studies of Salmo trutta show changes in growth associated with change in water level of lake. Analysis of age and size at migration from stream to lake and relation of this to growth rate.

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Canada Fisheries Research 570248
Board (1957)
Circ.biol.Sta.Nanaimo, 45(1)
Prospects for the 1957/58 herring
fishing season

Canada. Fisheries Research

Board

Ottawa, 195 p.

Annual report, 1956-1957, for the fiscal year ending March 31, 1957

General account of the work of the Board in the period under review followed by reports on the work of each of the biological stations, the work in oceanography, and the work of each of the technological stations; list of publications and reports, and of scientific staff. Something like this perhaps for model; the report generally follows this pattern.

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Candeias, A. (1957) 570251

Notas estud. Inst. Biol. Marit., 16:1-12

Tremátodes em Acartia clausi Giesb.

(Trematodes in Acartia clausi Giesb.)

The occurrence of metacercariae of a form of Trematode Hemiurid, presumably Hemiurus communis Odhner, in Acartia clausi Giesb. from the north coast of Portugal.

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Canada. Fisheries Research 570249
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Ottawa, 182 p.
Annual report of the Fisheries Research
Board of Canada - 1955. En Fr

Description of activities and principal results in fisheries biological and technological research and oceanographical investigations.

Capurro, S.L. and 570252

M. Rosenmann (1957)

Invest.zool.chil., 3:111-3

Formación de anticuerpos en Cricetus
auratus "golden hamster" (Formation
of antibodies in Cricetus auratus
"golden hamster"

A study of the sensitivity of the golden hamster, using <u>Bufo</u> spinulosus serum as antigen.

GLM:t1

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Caraiman, Gh., (1957). 570253 Bul. Inst. Cerc. piscic. Roman., 16(2):53-60 Observatiuni asupra ritmului de desvoltare a puietului de crap de cultura din iazul Tataraseni - Regiunea Succeava . (Observations on the growth rhythm of small cultured carp in Tataraseni pond - Suceava Region).

Growth of Cyprinus carpio during 1954.

Carlin, B. and 5702 K.B. Johansson (1957) Vandringsfisk. Modd., (5), 4 p. Blanklaxmärkning på Norrbottenskusten (Tagging of cel on the coast of Norrbotten (N. Sweden))

Some data on the recovery of tagged col.

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TL:tl

Carlander, K.D. and 570254 R.B. Moorman (1957) Progr. Fish Cult., 19(2):92-4 Some experiments in changing population balance in farm ponds

Discusses minnow-seine technique as an indicator of pond success, and trials of supplemental stocking, thinning with a scinc and rotenone treatment to improve population balance in Iowa, USA, ponds.

570257 Carlislo, D.B. (1957) Sci. News, Harmondsworth., 44:81-96 Male or female?

A discussion of the sexual biology of hermaphrodite prawns Paudalus, Calocaris, Hippolyte and Lysmata scticaudata, sandhoppers and the worm Bonellia.

WAD:wad

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Carlin, B. (1957) 570255 Vandringsfisk. Medd., (8), 3 p. Takttagelser över tillväxten hos märkta laxungar vid träguppfödning (Observations on the growth of tagged salmon smolt in hatchery)

Investigation on the competition for food by different size groups of salmon smolt and its influence on the growth.

Carlsson, G. (1957) Vandringsfisk. Medd., 3:5 p. Takttagelser vid laxlek i försöksakvariet i Hölle 1956 (Observations on salmon spawning in aquarium in Hölle 1956).

Observations on spawning behaviour of salmon in aquarium.

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Carpenter, J.H. (1957) 570259 ! Carthy, J.D. (1957) 570262 Discovery, 18(3):105-9 Limnol.Oceanogr., 2:271-80 The determination of calcium in natural Polarised light and animals waters Discusses the polarisation of solar light Photometric weight titration with by particles in the atmosphere and in othylonediaminetetraacetate ion in water and the reaction of sandhopper (Talitrus saltator), king crab and other the presence of ammonium purpurate is employed following isolation of the organisms to changes in the pattern of calcium by ion-exchange chromatography. polarisation. Calcium is separated from magnesium and strontium by the use of acetylacctone as a complexing elutant. Samples of sea water from the Bahamas region were examined by this procedure. HR:tl FAO:glk M M Carpenter, J.H. and 570260 Cascudo, L. da C. (1957) 570263 (1957)Docum. Vida rur., (11), 60 p. D.G. Cargo Jangadoiros (Raft fishermen) Tech. Rep. Chesapeako, (13):22 p. Oxygen requirement and mortality of the blue crab in the Chesapeake Bay Experiments on the lower limit of oxygen concentration for the existence of blue crab (Callinectes sapidus). Results of investigations on the cause of the abnormal local mortality of blue crab in Chosapeake Bay. FAO:tl FAO M M 570264 Carr, A. and 570261 Chacko, P.I. and J.W. Crenshaw, Jr. (1957) S. George (1957) Bull.Fla.St.Mus., 2(3):25-42 Rop. Madras Fish. Statist., (43):68 p. Fish statistics of east coast of Madras A taxonomic reappraisal of the turtle Pseudemys alabamensis Baur : State for 1950-51 A study of intergroup relationships of the genus Pseudemys in the southern United States.

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Chacko, P.I. and S. George (1957) Rep.Madras Fish.Statist., (42):1 Fish statistics of west coast of State for 1950-51		Chapelle, H.I., and M.N. Özerdem (1957) Balık Balıkçılık, 5(1):14-8 Türk balıkçı tekneleri (On the Turkish fishing boats) An illustrated article giving the of boat types and construction	! ! ! ?
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Chang, C.Y. (1957) Science, 126:121-2 Thyroxine effect on melanophore contraction in Xenopus laevis An investigation of the role of in the color control mechanisms		Chapman, D.G. (1957) Biometrics, 13:548-9 Problems of estimation of wildlif mortality rates Abstract of paper presented at me of Biometric Society and American	eting
Xenopus laevis.		Institute of Biological Sciences, 27-8/8/57, dealing with compariso methods involving tagging on age distribution estimation. Sources bias in these, new formula for calargest source of mortality is hupredation.	n of of re where
FAO:hr	F	SJH:sjh	MF
Chapelle, H.I. and M.N. Özerdem (1957) Balık Balıkçılık, 5(4):1-8 Türk balıkçı teknelerinin uygun güçleri (On the proper motor of the Turkish fishing boats) A brief review of power-hull rel with some suggestions to improve designs of present gir-gir seine Incl. plans for seiners on the evolutionary stage.	ation,	Chapman, D. A. (1957) Progr. Fish Jult., 19:182-4 An improved portable tattooing dev Detailed description of a machine the dyes used to mark juvenile Sagairdneri in migrant studies.	and
SJH:efa	М	WAD: wad	F

Chapman, D.W. (1957) Progr.Fish Cult., 19(2):95-6 Use of latex injections to mark steelhead Technique described using Salmo		Charpy, B. (1957) Contro Technique Forestier Trop Nogent-sur-Marne, 24 p. Tilapia macrochir et Tilapia me pleura - Leur élevage en piscie (Tilapia macrochir and Tilapia r pleura - Their rearing in fishe Illustrated review of biology e spp., techniques of culture, ar of popularizing them. With bible	elano- culture molano- culture) of these nd methods
WAD:wad	F	FiB:sjh	F
Chapman, V.J. (1957) Bot.Rev., 23(5):320-50 Marine algal ecology Review of the work done in marin ecology by regions and by subject matter (environmental factors, a and recolonization, sublittoral geographical distribution and no Extensive list of literature.	t utecology surveys,	Chater, E.H. and H. Jones (1957) J.Ecol., 45:157-67 Some observations on Spartina H. and J. groves in the Dovey of A quadrat survey of a Welsh est discussion of significance of tas a pioneer and an invader of vegetation.	estuary tuary with the species
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Chapman, V.J. et al. (1957) Trans.roy.Soc.N.Z., 84(4):695-74 Check list of the fresh-water al New Zealand	7	Chatterjee, S.K. (1957) Electro-Technol., 1:81-9 Behaviour of sea water and its ents at ultrahigh frequencies	570276 constitu-

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Chew, F. (1957) 570283

Paper presented at the Thirty-Eighth

Annual Meeting, Washington, D.C.,

April 29 - May 2, 1957

The hydrography of the Florida Gulf coast water

Chickering, A.M. (1957) 570286 Bull.Mus.comp.Zool.Harv., 116(5):301-4 The genus Tetragnatha (Araneae, Argiopidae) in Panama

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Chew, F. and L.P. Wagner (1957) 570284

Mar.Lab.Univ.Miami, mimeo, 57-9:128

Tropical Oceanography - Semi-annual
report of investigation between the
period of 15 November 1955 to 15 May
1956

Summary of the oceanographic work off Florida from 15 Nov. 1955 to 15 Nov. 1956. Analysis of the fluctuations of Florida current; seasonal temperature pattern with BT data. Oceanographic data given in graphic and tabular form.

Chîmits, P. (1957)
Fish.Bull.F.A.O., 10(4):211-5
Tilapia in ancient Egypt

Study of inscriptions, bas reliefs and writing of Herodotus shows that Egyptians had priority in development of culture of fish in ponds, especially of T. nilotica. Catches in Nile also included Lates niloticus, Synodontis bentesoda, eels, mormyre, tetraodon and barbel. Ill.

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Chew, F., L.P. Wagner 570285 and R.C. Work (1957) Rep.Univ.Miami Mar.Lab., (57-21) Heat transport of the Florida current

Motes on the methods used for computation and results of the computations (tabulated and graphical) for heat and mass transport during different seasons.

Chittleborough, R.G. (1957) 570288
Comments upon memorandum concerning
southern stocks of humpback whales.
Submitted by members of the Norwegian
Whale Research Institute to the
Scientific Sub-Committee of the
International Whaling Commission in
March, 1957. Mimeo, 3 p.

A critical review of the statements made on the status of the stocks of Megaptera nodosa in the southern hemisphere.

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Chittleborough, R.G. (1957) 570289 Fish.News Lott.Aust., 16(7):11,21 Australian whale marking

A brief review of whale marking operations giving the number of hump-back whales (Mogaptera nodosa) marked and recovered since 1949 on the eastern and western Australian coasts. The limitations of the Discovery type of mark are discussed.

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are appended.

Cholnoky, B.J. (1957)

Bot. Notiscr, 110(3):325-62

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Chittleborough, R.G. (1957) 570290 Fish.News Lett.Aust., 16(6):5 The breeding cycle of the female humpback

Description of the female reproductive cycle of Mcgaptera nodosa.

Chowdhury, S.H. (1957) 570293 Agric.Pakist., 8(2):138-53

Uber die Diatomeenflora einiger Gewaesser in den Magalies-Bergen nahe Rustenburg

(Transvaal) (On the diatom flora of

mountains near Rustenburg (Transvaal))

notes on the environmental conditions.

some (frosh) waters in the Magalies

Description of the associations of

diatom in different localities with

Lists of diatoms with taxonomic descriptions and plates with figures

An investigation of the Karnaphuli Paper Mill effluents and its deterimental effects on fish and other aquatic life of the river

Contains the results of a preliminary survey and investigation.

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Chiu, S.Y. (1957) 570291

<u>Acta zool.sinica</u>, 9(1):85-100

Preliminary notes on the Ctenophores of the South China Sea

Contains analytical keys for the species of Pleurobrachia and Beroë of the coastal waters of Kwangtung Province where P. globosa, B. cucumis and Ocyropsis crystallina were found in abundance. The process of digestion, the morphology of the stomodael pouches and locomotion of P. globosa are described.

Christonson, A.M. (1957) 570294
Limnol.Oceanogr., 2:180-97
The feeding behaviour of the seastar
Evasterias troschelii Stimpson

Study in an aquarium of the methods of attachment to a clam, the magnitude of the forces needed to open the clam and the time required for different feeding procedures.

FAO:hr

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Christomanos, A.A. (1957) Sea Frontiers, 3:94-7 A Greek marine station

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Clarke, G.L. and

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Description of the Marine Biochemistry
Laboratory, St. George, Limni, and its
activities.

R.H. Backus (1957)

Wood's Hole Oceanogr.Instn, Ref.57-15, 14 p.

Measurements of light penetration in relation to vertical migration and records of luminescence of deep-sea animals

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Churchill, W. (1957) 570296

J.Wildlife Mgmt, 21:182-8

Conclusions from a ten-year creel census on a lake with no angling restrictions

Studies on a warm-water Wisconsin lake, in which a complete record of the harvest and other data was collected under a permit system, and where no evidence of depletion was apparent after 10 years of unrestricted hook and line fishing.

Clarke, R. and 570299
S.G. Brown (1957)
Norsk Hvalfangsttid., 46:513-7
International co-operation in Antarctic whale marking from 1945 to 1957

Account on the tagging programmes 1945-1957.

WiD:wad

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Clark, H.F., P.W. Kabler and E.E. Geldreich (1957) Wat.and Sewage Wks, 104:385-7 Advantages and limitations of the membrane filter procedure Cleland, K.W. (1957) 570300

<u>Aust.J.oxp.Biol.med.Sci.</u>, 29(1):35-45

The enzymatic architecture of the unfortilized oyster egg

Methods are described for the contrifugal separation of the following
granules from oyster egg homogenates:
P. granules (protein yolk), M. granules
(mitochondira), S. granules (microsomes),
and L. granules (lipide yolk or Golgi
apparatus). Nucleid acid content was
measured and presence and distribution of
various enzymes was determined.

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Clemens, H.B. (1957) 570301 Clench, W.J. (1957)570304 Calif.Fish Gamo, 43:299-307 Broviora, (76):4 p. Fishes collected in the tropical eastern Two new land and freshwater molluscs from New Guinea Pacific, 1954 Describes methods of capture, gives map and annotated list of specimens and stations. F SJH:sjh 570302 570305 Clemons, H.P. and Clench, W.J. (1957) K.E. Sneed (1957) Bull. Mus. comp. Zool. Harv., 116:121-69 Spec.sci.Rep.U.S.Fish Wildl.Serv., A catalogue of the Corionidae (Mollusca-Pulmonata) (219):11 p. The spawning behaviour of the channel catfish Ictalurus punctatus Experiments with the use of pituitary extract injections in analysis of prospawning behaviour of the spawning act and post-spawning behaviour. GLK:glk F Clements, M. (1957) 570303 Coates, J.A. et al. (1957)Fish.Ros.Pap.Wash.Dep.Fish., 2(1):67-72 Bull.Inst.oceanogr.Monaco, 1091:1-9 Brino shrimp nauplii (Artemia gracilis) The proteolytic activity of the thyroid as food for juvenile pink salmon and other tissues of the dogfish, Scyliorhinus (Scyllium) canicula Tests on growth and mortality of Reports on experiments which demonstrated Oncorhynchus gorbuscha in hatchery; comparison with normal food (Salmon the presence of a proteolytic enzyme of viscora and beef liver) the catheptic type in the crude glyceral extracts of the thyroid of the species. MF FAO:hr FAO: sjh

Colarusso, A.L. (1957) Cockcroft, J. (1957) 570307 U.S.P. 2,785,136 Nature, Lond., 180:64-7 Briquettes for desalting sea water Atomic energy and its biological implications Summary of the studies of physiological effects and influences of radioactive contaminations on animals and especially on men; and the establishment of permissible level of exposure. M GLK: tl MF Cocking, A.W. (1957) Cole, H. (1957) 570311 570308 New Sci., 2(49):27-8 Nature, Lond., 180:661-2 The economics of corrosion Rolation between the ultimate upper lethal temperature and the temperature-range for Brief review of the problem on the good health in the roach (Rutilus rutilus) occasion of a recent display in London Roach maintain condition at 26°C, die after of new anti-corrosion methods and a few weeks at 30°C, and die within a week equipment. Includes remarks on ship at 32°C. A gradual rise in temperature has corrosion and protection. deleterious effects above 30°C. The ultimate upper lethal temperature has little relation with range for health and breeding, and fish may disappear from water below the u.l.t. Criteria are suggested by which the thermal relation-

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Collior, A. (1957)

(199):11 p.

for inboard use

Spoc.sci.Rop.U.S.Fish Wildl.Serv.,

work, with notes on operation.

Gulf-II semiautomatic plankton sampler

Description of sampler for quantitative

1: Suppl. 52

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ships may be compared.

Cohen, S.B. (1957)

Googr. Rev. 47,1:66-85

Israel's fishing industry

A survey of Israel's sea and inland

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Collins, V.G. (1957) 570313 Compar, C.L. (Ed.) (1957) J.gen. Microbiol., (Symp. on plankton), Publ. Amer. Ass. Advanc. Sci., (49): 450 p. 16:268-72 Atomic energy and agriculture Planktonic bacteria Contains numerous articles by different Discusses incidence, stratification and authors on the use of isotopes with relation with other plankters of autobrief descriptions of techniques and and allochthonous bacteria in Windermere, results in the field of agricultural Esthwaite and other English lakes and research, with special emphasize on describes culture experiments with research in plant and animal physiology. different nutrients. FiB: tjj :tl MF· 570314 Colman, J.S. (1957) Combs, B.D. and 570317 Liverpool University Press, 39 p. R.E. Burrows (1957) Annual report for 1956 (No. 69) of the Progr. Fish Cult., 19(1):3-6 Threshold temperatures for the normal Marine Biological Station at Port Erin, Isle of Man development of Chinook salmon eggs Director's report on staff; buildings, Describes results of constant experiments equipment, boats and gear; work done with oggs of Oncorhynchus tshawytscha (fish and fisheries, invertebrates and and variable temperature experiments plankton, botany, hydrography). Programme with 0. tshawytscha and 0. gorbuscha. for 1957; meetings attended by staff, visiting research workers; student classes held; hatchery and aquarium; publications. Includes papers by Bowers, A.B., Smith, W.C., Slinn, D.J., and Ranade, H.R. and Colman, J.S., which sec. MF. M WAD: wad FAO:sjh Colowick, S.P. and Comfort, A. (1957) 570315 N.O. Kaplan (Ed.) (1957) In "The biology of ageing" by Yapp, W.B. Academic Press Inc., New York, 980 p. and G.H. Bourne (Ed.), Symp. Inst. Biol., Methods in enzymology - Vol. IV. Special (6):23-5 Agoing in animals techniques Short summary of knowledge of survival curves of animals, including fish. See 571827.

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Comita, G.W. and 570319 J.J. Comita (1957) Limnol.Oceanogr., 2:321-32 The internal distribution patterns of a calanoid copepod population, and a description of a modified Clarke-Bumpus plankton sampler

A modified Clark-Bumpus plantaton sampler was constructed so that the volume of water filtered could be pre-set, and the behaviour of this sampler was studied using a number 20 net.

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of the hearts of crustaceans and mammals. Correlation between the time of different

spaces and the body weight were compared with that predicted by the theory of biological similaritics.

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Conant, R. (1957) Copeia, (2):152-3

The eastern mud salamander, Pseudotriton montanus montanus: A new state record for New Jersey

Comments briefly upon the distribution of this sp. States that the sp. is to be added to herpetofauna of this district.

570323

Concha, B.J. and F.F. Vargas (1957)

Concha, B.J. and

F.F. Vargas (1957)

Invest.zool.chil., 3:96-105

teleostean S. sanguineus)

teleostco Sicyases sanguineus

Actividad eléctrica del corazón del

(Electric activity of the heart in the

The cardiac electric activity of the

similar activity of the human heart and

common ching-fish is compared with

Invest.zool.chil., 3:122-7 Potenciales eléctrices y acción de farmacos en el corazón del crustaceo Aegla laevis (Decapoda, Anomura) (Electrical potentials and action of drugs in the heart of the crustacean A. lacvis)

Gives the results of a study of electric activities in the heart of the species.

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570321 Concha, B.J. (1957) Invest.zool.chil., 3:106-10 Acomodación en corazón de sapo, Calyptocephalus gayi (Accomodation in the heart of the frog, Calyptocephalus gayi)

Gives the results of a study of responses of the frog's heart to the stimulation with exponential rising currents.

570324

Conference on Co-ordination of Fisheries Regulation between Canada and the United States

(1957)

| Scattle, Wash., 15 p. Summary of proceedings

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Connell, R. and 570325 | Conseil Supériour de la A.H. Corner (1957) Pêche (1957)Canad. J. Zool., 35:525-33 Paris, 59 p. Polymorphus paradoxus Sp. nov. (Acantho-Bulletin officiel d'information No. 27 cephala) parasitizing beavers and muskrats in Alberta, Canada Reviews the various activities of the Fisheries Council including technical A new species is described from Castor activities, regulations and law canadensis and Ondatra zibothica from enforcement. a lake in Elk Island National Park. A species of amphipod in the lake was heavily infected with larval Acanthocephala, although the possible rolationship of this infection to that in the hosts has not yet been determined. FAO:hr F MP Conseil Permanent International 570326 | Convenção Internacional de 570329 (1957)pour l'Exploration de la Poscarias Bol. Pesca, 11(54):63-103 Mer (1957)Statist. News Lett. Cons. int. Explor. Mer, Relatório da subcommissão "ad hoc" na quarta reunião da Commissão Permanente -(1), 22 p. setembro de 1955 (Report of the Herring - North Sea 1955 "ad hoc" subcommission at the fourth meeting of the Permanent Commission -1st of a new mimeograph series to give September, 1955) recent statistics on catches and catch per unit effort by months, areas (1/2 degree rectangles), and type of vessel, Portuguese translation of the report. for each country. FAO:hr . M SJH:sjh M 570330 Conseil Supériour de la 570327 : Cooke, C.W. (1957) Pêche Proc. U.S. nat. Mus., 107(3379), 12 p. (1957)Rhynobrissus cuncus, a new echinoid from Paris Bulletin official d'information No. 28 North Carolina A report of the administrative, judicial and technical activities of the Council. FAO:hr F TI

Corbeil, E. (1957) Cooper, R.O. (1957) 570334 570331 Progr.Fish Cult., 19:190-2 Actualités mar., 1:7-10 Aerial fish distribution in a Montana Recherches (Rosearch) lake Notes on research work in marine and fresh waters. Describes methods used to transport Salmo gairdneri and plant them by free fall. WAD: wad FAO:glk MF Cope, O.B. (1957) 570332 Corlett, E.C.B. (1957) 570335 New Sci., 2(49):33 Spec.sci.Rep.U.S.Fish Wildl.Serv. Transom-stern trawlers (208):74-84Races of cutthroat trout in Yellowstone Lake Correspondence on 571940, pointing out that trawlers with this stern type have already been in service for some Contribution to written symposium on sub-population of fishes (581145). months. Study of Salmo clarki lewisi (Girard) populations. FAO: sjh FAO: sjh M Corner, E.D.S. and 570336 Cope, O.B. and 570333 D.W. Slater (1957) F.H. Rigler (1957) J.Mar.biol.Ass.U.K., 36:449-58 Res.Rop.U.S.Fish.Scrv., (47):22 p. Role of Coleman Hatchery in maintaining The loss of mercury from stored seaa king salmon run water solutions of mercuric chloride A quantitative and qualitative study of the Studies were inaugurated at Coleman Hatchery, California, to determine how loss of mercury from sea water by means of the chloreform-dithizons procedure and many of the fish (Oncorhynchus by the use of radioactive mercury (203Hg). tshawytscha) entering the valuable sport and commercial salmon fisheries of Demonstrates the considerable importance California had originally been released of bacteria as a factor in the process. from the hatchery, and which was the

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better practice: to release immature salmon from the hatchery in the spring

or to release them in the fall.

Costlow, J.D., Jr. and 570337
C.G. Bookhout (1957)
Biol.Bull.Wood's Hole, 112(3):313-24
Lervel development of Balanus eburneus
in the laboratory

Morphological description of different
naupliar stages with data on their
duration, reared in segregated and in
mass culture in the laboratory.

Council for International 570340
Organization of Medical
Sciences (1957)
Blackwell Sci.Publ., Oxford, 32 p.
The planning of international meetings

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Coulson, J.C. and 570338

E. White (1957)

Bird Study, 4:166-71

Mortality rates of the shag estimated by two independent methods

An estimate of 44% mortality from recoveries of dead shags is regarded as excessive owing to ring losses. Estimates by Jackson's negative method on the Farne Islands gave a figure of 14%.

Cowper, T.R. and 570341 R.J. Downie (1957) Fish News Lett.Aust., 16(5):7, 9, 25 Line fishing survey of S.E. slope

Summary of a report to be published elsewhere.

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Coulter, M.W. (1957) 570339

J. Vildlife Mgmt, 21(1):17-21

Prodation by snapping turtles upon aquatic birds in Maine marshes

Includes data on fish found in stomachs of Chelydra serpentina Linnaeus.

Craig, H. (1957) 570342 Tellus, 9:1-17

The natural distribution of radiocarbon and the exchange time of carbon dioxide between atmosphere and sea

Steady-state equations governing the transfer and distribution of a radioactive isotope between its various exchange reservoirs are applied to the natural distribution of carbon 14. The radiocarbon enrichment or depletion in each reservoir, relative to the hypothetical state in which mixing is infinitely faster than the decay rate, is evaluated as a quantitative function of the exchange rates between the reservoirs.

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Crary, A.P. and
N. Goldstein (1957)
Deep-Sea Res., 4(3):185-201
Geophysical studies in the Arctic Ocean

Topography; seismic reflections and gravity measurements along the path of the floating ice-island T-3.

Cridland, C.C. (1957) 570346

J.trop.Mod. (Hyg.), 60:250-6

Ecological factors affecting the numbers of snails in permanent bodies of water

Study of collections of Biomphalaria adoresis, B. sudanica, Bulinus forskalii & Igmnaca natalonsis from Uganda pends, 1/8/54 - 28/2/56; incidence of trematode infection; seasonal population changes.

GLK: tl

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Creach, P.V. (1957) 570344
Rev.Trav.Inst.Pêches marit., 21:415-30
Variations physiologiques du phosphore total de la coquille de Gryphaca angulata Lmk) (Physiological variations in the total phosphate in the shell of G. angulata Lmk)

Methods, experimental results and examination of the influence of composition of bottom mud on the phosphate content of the shell.

Cridland, C.C. (1957) 570347

J.trop.Med. (Hyg.), 60:18-23

Further experimental infection of several species of East African freshwater snails with Schistosoma mansoni and S. haematobium

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Crichton, M.I. (1957) 570345

Phil.Trans., B677(241):45-91

The structure and function of the mouth parts of adult caddis flies (Trichoptera)

Crisp, D.J. (1957) 570348

Nature Lond., 179(4570):1138-9

Effect of low temperature on the breeding of marine animals

Experiments made with two species of arctic barnades Balanus balancides and B. balanus showed that by maintaining individuals at a low or high temperature it is possible to cause breeding to take place at times of the year other than the normal breeding season.

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Crocker, D.W. (1957) Bull.N.Y.St.Mus., (355), 97 p. The crayfishes of New York State	70349	Cronin, L.E. et al. (1957) 570352 Spcc.sci.Rcp.Va Fish.Lab., (8):21 p. A partial bibliography of the genus Callinectos A world list of over 550 references to the decaped crustacean genus Callinectos, divided into (1) published references, (2) unpublished manuscripts, and (3) incomplete or unverified references.	
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Croghan, P.C. (1957) 57 Proc.R.phys.Soc.Edinb., 26(1):9-10 The colonisation of the freshwater habitat Account of comparative study of osm regulation in freshwater and bracki (Baltic) races of Mesidotea in Swed Full account in press (J.exp.Biol.,	sh on.	Croome, A. (1957) Discovery, 18:260-4 The international geophysical years and the month News report including: account recruiting scientists for polar in marine biology in the Falklas Islands Dependency; final calent Regular World Days and World Meteorological Intervals.	of roscarch
SJH: sjh M	Œ	$F\Lambda O:sjh$	M
Crompton, J. (Pseud.of 5 Lamburn, J.B.) (1957) Gardon City, N.Y., Doubleday, 233 r The living sea	70351	Croome, A. (1957) Discovery, 18(1):31-5 The international geophysical y Month by month News report of programme develo including preparations for hydr surveys.	pments
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Croome, A. (1957) 570355 Discovery, 18(2):71-4 The international geophysical year. Month by month

Review includes plans for oceanographic work.

Cruz, J.A. Machado (1957) 570353

Notas Est.Inst.Biol.marit., (14)

A sardina do norte de Portugal (Sardina pilchardus Walb.). Caractéristicas ctárias c de reprodução (The sardina of northern Portugal (Sardina pilchardus Walb.). Age and reproduction characteristics).

En

Study of length, age composition and sexual maturity of 99 samples from the commercial catch.

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Month by month

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Croome, A. (1957) 570356 <u>Discovery</u>, 18(7):307-10 The international geophysical year.

Short account of the IGY programmes of different countries.

C.S.I.R.O. (1957) 570359 Rep.Div.Fish.Oceanogr. C.S.I.R.O., (4):16 p.

An analysis of recent catches of hump-back whales from the stocks in groups IV and V

Analyses the catches of Megaptera nodosa from 1949/50 to 1955/56 from Western Australia and Antarctic region between longitude 70°E. to 130°E. and longitude 130°E. to 160°W. A comparison of whaling of the species in antarctic and temperate waters is also presented.

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Crusz, H. (1957) 570357 Ccylon J.Sci., Sec.B, 25:193-5 New Anaporrhutine trematode, Staphylorchis parisi sp. nov. from the shark, Sceliedon walbeehmi

C.S.I.R.O. (1957)

Rep.Div.Fish.Oceanogr. C.S.I.R.O.,

(5):16 p.

F.R.V. DER AENT HUNTER

Description of the biological and hydrographical results of the cruises.

DH3/56 was a tuna longlining cruise off the New South Wales coast, DH4/56 was a cruise in Bass Strait to determine the correlation between the euphausiid Myetiphanes australis and the barracouta Thyrsites atun, and DH5/56 was a cruise by the Division of Meteorological Physics, C.S.I.R.O. in the Port Phillip Bay area.

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570361 Cuba. Instituto Nacional de la Pesca (1957)

La Habana ¿Qué es el Instituto Nacional de la Pesca? Sus actividades y fines (What is the National Fisheries Institute? Its activities and aims)

Describes the structure, functions and work accomplished by the Cuban Institute. Information on a planned fisheries terminal, fisheries resources and fisheries, and a list of common English, local and scientific names of the most important commercial species of Cuba is also given.

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Currie, R.I. and

P. Foxton (1957)

J. Mar. biol. Ass. U.K., 36(1):17-32

A meter is described which will record

both the depth and amount of water which a net filters as it is hauled vertically

through the water. The meter records on

it is possible to study the complete

occurred, the depth of closure, etc.

behaviour of the net below water, what

depth it has fished, how much clogging

a smoked glass cylinder. From the records

A new quantitative plankton net

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570364

570362 Cuerrier, J.P. and F.H. Schultz (1957) Wildl.Mgmt Bull., Ser. 3, (5):41 p. Studies of lake trout and common whitefish in Waterton Lakes, Waterton Lakes National Park, Alberta

Cushing, D.H. (1957) 570365 Fish.Invest., Lond., Ser.II, 21(3):16 p. The interpretation of echo traces

The form of fish traces can give some information on the size and formation of fish shoals. Illustrations of traces for: several species under different conditions.

FAO:sjh

570363 Curl, H. (1957) Limnol.Oceanogr., 2:315-20 A source of phosphorus for the western basin of Lake Erie

The western basin of Lake Brie is supplied temperature measurements, April-August with phosphate phosphorus by the Maunec River in Ohio. This apparently is the most important source for the lake due to the high phosphorus concentrations involved and the large volume of flow in the spring menths.

Cushing, D.H. (1957) 570366 Fish. Invest., Lond., Sor. II, 21(5) The number of pilchards in the Channel

Echo survey, egg sampling, plankton and 1950. Stock estimate from egg numbers used to calibrate echo traces. Horizontal and vertical fish distribution; relation of Clupea pilchardus to environmental factors.

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FAO: sjh

Cushing, D.H. (1957) Nature, Lond., 179:876 Production of carbon in the sea Presents data on quantity of carbon mgm./n.3/day as % of standing cropphytoplankton in North Sea.	570367 !	da Franca, P. (1957) Trab.Miss.Biol.marít., (12-16):9- Contribuição para o conhecimento Serranidae de Angola (Contrib to the knowledge of Serranidae of Angola) A systematic study with descripti the species.	dos ution
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Cushing, D.H. (1957) Nature, Lond., 180:617 Production of carbon in the sea Reply to 571213.	570368	Daget, J. (1957) Hydrobiologia, 9(4):321-47 Données récentes sur la biologie poissons dans le delta central du (Recent data en fish biology in t Niger delta) Description of environmental fact species list; spawning seasons, migrations, growth of Alestes and Tilapia spp.; adaptations to respicenditions.	570371 des Niger) he
GLK:glk	M :	FAO:wad	F
Cushing, D.H. and A.C. Burd (1957) Fish.Invest., Lond., 20(11):31 p. On the herring of the Southern Nor Discusses the identity and unity of "Downs" stock; recent natural char the stock and its environment and that can be ascribed to the effects of industrial fishery of the change of maturity, and of fishing on brostock.	rth Sea : of the nges in changes ts of the in age	Dahl, E. (1957) Nature, Lond., 179:482 Embryology of X organs in Crangon allmanni Brief account of investigations cout on embryological material of sp.	arried
FEO. sign	1	FAO:efa	: M

Dahl, J. (1957) 570373 ForskvandsfiskBl., 55(8):5 p. Fiskedrabet i Lyngby Sø (Fish mortality-in lake Lyngby)

Description of fish mortality due to lack of oxygen, and data of the changes which took place in the lake and caused the mortality (high pH caused by intensive photosynthesis and low barometric pressure).

Dales, R.P. (1957) 570376

<u>Bull.Scripps Instn Oceanogr.</u>, 7:99-167

<u>Pelagic polychaetes of the Pacific Ocean</u>

Reviews the species of pelagic polychaetes that have been found in the Pacific Ocean, and gives keys and illustrations to aid in their identification. The keys include species that occur elsewhere but have not yet been recorded from the Pacific.

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Dahl, J. (1957)

ForskvandsfiskBl., 55(9)
Forskvandskvabbe (knude) fra saltvand
(Lota lota, a freshwater burbot caught
in marine waters)

Dales, R.P. (1957)
New Scient., 3(53):22-3
Ragworms and caviar

570377

Popular account of work initiated by Prof. Zenkevitch in transplanting and establishing populations of Norcis succinca in the Caspian Sea from the Sea of Azov; as a result of which stocks of Acipenser have increased by augmentation of their food supply.

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Dale, H.M. (1957) 570375
Canad.J.Res.(Bot.), 35:51-64
Developmental studies of Elodea canadensis Michx. II. Experimental studies on morphological effects of darkness

Gives description of morphological characteristics of sprigs grown in the dark and discusses factors that may be responsible for pattern of growth.

Dalos, R. Ph. (1957) 570378

J.Mar.biol.Ass.U.K., 36(1):81-9

The feeding mechanism and structure of the gut of Owenia fusiformis delle Chiaje

Owenia may feed either by ciliary means or by swallowing sand and detritus. The gut consists of three main parts, a foregut secretory, a non-secretory mid-gut region and a hind-gut which is non-secretory, non-absorptive. The mid-gut contains coproporphyrin III and also phaepherbide-b, to which the green colour is due. The green pigment in the epidermis is also phaepherbide-b, but phaeopherbide-a is apparently absent from the body.

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d'Ancona, U. (1957) 570379

Ric.sci., 27:1101-5

Istituto nazionale di studi talassografici - Attività svolta durante gli anni
1955-1956

Report on the Institute's activity in the last two years; reorganization of the residence, scopes and finalities, thalassographic cruise in the Adriatic, Archive for Oceanography and Limnology, marcographic Section in Trieste and Section for hydrobiology of the lagoons in Chicggia, staff, research boats, participation in international activities, Geophysical Year.

FAO:glk

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FAO:sjh

Dansercau, P.M. (1957)

Ronald Press Co., New York, 394 p.

Biogeography and ecological porspective

A text-book of general ecology, dealing with history of biota, bioclimatology,

synccology, antocology, and influence of

man on animal and plant communities.

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Danel, P. (1957) 570380 <u>Trans.Amer.geophys.Un.</u>, 38(5):761-3 Discussion of "Properties of shoaling waves by theory and experiment"

Discussion on original article by P.S. Eagleson (1956, <u>Trans.Amer.goophys.Un.</u>, 37:565-72), on the Stokes' third approximation for wave celerity in relatively shallow water.

Dao Van Tich (1957) 570383

Zool.Zh., 36(8):1209-16

Zoologicheskie issledovaniia v tschtral'nom V'etname (Raion Vin'-Lin' v
provintsii Kuang-Tri) (Report on the
zoological researches in the Vinh-Linh
region (Quang-Tri's province, central
Viotnam)

List of fishes and other organisms collected, with some biometrical and bionomic notes.

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Dannevig, G. (1957) 570381 <u>Tidskr.Hermetikind.</u>, 43(1):23-7 Omkring vekslingene i brislingfishet (On the fluctuations in the sprat fisheries)

Description of the fluctuations from 1902-1955. Notes on results of investigations on life history, distribution of eggs and larvae and discussions on the reasons for fluctuations.

Darbyshire, J. and S. Ishiguro (1957) Nature, Lond., 180(4577):150 Tsunanis

Explanation of the origin and meaning of the word "tsunami" in Japanese.

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Darlington, P.J., Jr. (1957) John Wiley and Sons, Inc. New York, 675 p. Zoogeography: the geographical disbution of animals A geographical zoogeography concern	stri-	Davies, D.H. (1957) Invest.Rep.Div.Fish.S.Afr., (26), The South African pilchard (Sardioccllata) - Size composition of tommercial catches, 1950-55 Summarizes data under following h	he
only with the land and fresh water principally with vertebrates.		1) Sampling-catching method; free daily routine. 2) Assessment of sampling-test of homogeneous popu possibility of improvement. 3) Desize-groups by months. 4) Dominan groups by years. 5) Size composit of catches in selected areas.	ucncy; clation; minant ct size-
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da Silva, Morcira P. (1957) Int.hydr.Rev., 34(2):141-4 Quelques methodes nouvelles pour réduction rapide des observations océanographiques (Some new metor rapid reduction of oceanograph observations)	thods	Davison, V.E. (1957) Louisiana Conserv., 9(5):14-9 Managing farm fishponds for bass bluegills A popular illustrated article.	570389 and
Nomograms for T-S, and calculation dynamic anomaly.	n of		
FAO:glk	М	FAO:sjh	F
Davies, D.H. (1957) Invest.Rep.Div.Fish.S.Afr., (29) The South African pilchard (Sardin ocellata) and maasbanker (Trachuru trachurus) - Young fish survey, 19 Results of working the blanket-ner regularly once a month for a period a year at each of eleven stations situated off the west coast of Sou Africa. The occurrence and abundant juvenile fish are related to water temperature, winds and availability food.	t od of ith nce of	Dawson, C.A. (1957) Canad.J.Econ.pol.Sci., 23:272-4 Arctic research: The current stat research and some immediate probl in the North American Arctic and arctic Critical review of a paper by D. with same title. (Spec.Publ.arct. N.Amer., 2(1955), repr. from Arct 7(3-4):113-366).	Sub- Rowley, Inst.
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Dawson, E.Y. (1957) 570391 Day, L.R. (1957) 570394 Pacif.Sci., 11(1):92-132 Bull.Fish.Res.Bd Can., (111):103-19 An annotated list of marine algae from Populations of herring in the northern Eniwotok Atoll Gulf of St. Lawrence List of collecting localities, glossary, Lenght and age composition; growth; key, illustrations; description of some year-class abundance; sex and maturity; new species and varieties. vertebral count. GLK: glk M T/F FAO:glk 570392 Dawson, R.M.C. (1957)(1957)570395 Day, L.R. Biol. Rev., 32:188-229 Bull. Fish. Ros. Bd Can., (111): 165-76 The animal phospholipids: their structure, Vortobral numbers and first-year growth metabolism and biological significance of Canadian Atlantic herring (Clupca harongus L.) in relation to water Account of critical investigations into temperature the dynamic biochemistry of animal phospholipids, their relation to other Water temperatures are inversely related metabolic systems and physiological to vertebral number and directly related functions in animal economy. to first-year growth when compared for different areas, different year-classes and different ages of the same yearclasses. FAO: efa MF FAO:glk M 570393 Deacon, G.E.R. (1957) Challenger Soc.; 3(9):36 Day, L.R. (1957) 570396 Bull.Fish.Rcs.Bd Can., (111):121-37 Populations of herring in the southern The occanographic contribution to the Gulf of St. Lawrence International Goophysical Year Comparison of size, age, maturity and Abstr. of paper read at Joint Meeting vertebral data collected in 1946, 1947 of the Water Pollution Research Laboratory, Stevenage; and Zoological and 1948 suggest that two or more spring-spawning populations contributed Society of London, Regent's Park, London. 24th and 25th January, 1957. to the commercial herring fisheries in the southern Gulf of St. Lawrence. Lists projects chosen to provide useful contribution to IGY.

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Deacon, G.E.R. (1957) 5703971 do Buen, F. (1957) 570400 <u>Discovery</u>, 18:386-7 Invest.zool.chil., 4:57-61 Deep ocean currents Algunos datos para el conecimiento de la biología del langostín o langostino Popular description of the use of (Cervimunida johni) (Some data for current data and necessity to measure the knowledge of plated lobster (Cervipermanent currents. Description of munida johni)) an instrument to measure deep currents, based on radio-sondo technique. Gives data on the condition of the fishery, sexuality, maturity, total length, etc. from October to November 1955. FAO:tl HR:hr M Deacon, G.E.R. (1957) 570398 do Buon, F. (1957) 570401 Mar. Obs., 27(175):33-6 Invest.zool.chil., 4:33-56 Occanography in the International Declinación de las poblaciones animales Geophysical Year on aguas del litoral, preferentemente moluscos y crustaceos (Diminishing of Description of the occanographical the littoral animal populations. programme during the IGY, especially especially shellfish and crustaceans). En the 1) mean sea-level, 2) long waves, 3) water circulation projects, and the Reviews the causes of natural mortality significance of research on the above. among littoral populations of fish and shellfish; mortality due to fishing and that caused by changes in the aquatic environment. Near extinction of oysters in the Guasimas lagoon (W. Mexico) and the obvious reduction of size in oysters at the Tampamachoco lagoon (G. of Moxico) are quoted. FAO:tl : HR:glk MF Duacon, G.E.R. (1957) 570399 Do Buisonjo, P.H. et al. (1957) Nature Lond., 179:66-8 Bel.Sec.venezol.Cicnc.nat., 17(86):184-209 Marine science in the south-east Pacific Informe acorea de un reconocimiento Ocean biológico y goológico de las islas venezolanas Las Aves (Report of a A popular account of occanographical biological and geological survey of the problems off Chilean and Peruvian coasts. Venezoclan Islands of Las Aves) Contains notes on the marine fauna and flora. FAO:wad M FAO:hr M

de Carvalho, V.A. (1957) 570403 Decloitre, L. (1957)Presidencia da República do Brasil, Bull. Inst. franç. Afr. noire, A. Sci. nat., Conselho Coordunador d Abasteeimento, 19:367-72 Seção: Pescado em colaboração com a Estériaux pour une faune rhizopodique F.O, 33 p. (mimoo) d'A.O.F. (Material for a rhizopod Nomes vulgares de peixes brasileiros fauna of F.W.A.) marinhos com seus correspondentes em sistemática (Scientific and common Taxonomy and distribution of material names of Brazilian marine fishes) from the Mauretanian and Ivory Coasts. A glossary of names. GLK:hr M FAO:glk \mathbb{H} De Carvalho Rios, E. (1957) 570404 Dusring, R.A. and 570407 Ann. Ass. quim. Brasil., 12:181-7 R.B. Setlow (1957)Chemical composition of the algae used as Science, 126:397-8 fertilizers in Rio Grande Inhibition of cell division of Escherichia coli by low doses of ultraviolet light Cultures of Escherichia coli B carried on nutriont agar slants were inoculated into C-1 minimal medium and after appropriate dilution were irradiated with a water prism ultraviolat monochromator at various wavelengths. F FAO:glk MF Decary, R. (1957) 570405 Doovey, E.S. (1957) 570408 Encycl. Hens. d'Outre-Her, 77:15-8 Trans. Conn. Acad. Arts Sci., 39:213-328 La pisciculture à Madagascar Limnologic studies in Middle America. (Pisciculture in Madagascar) with a chapter on Aztec limnology GLK: tl F F

de Jager, B.v.D. (1957) 570409 Invost.Rep.Div.Fish.S.Afr., (25):78 p. The South African pilchard (Sardinops occllata) and maasbanker (Trachurus trachurus) - Variations in the phytoplankton of the St. Helena Bay area during 1954

The relationship between the occurrence, quantity and distribution of phyto-plankton and certain hydrological factors. The phytoplankton genera recorded at two selected stations are tabulated in order of abundance; the quantity of phyto-plankton in relation to depth distribution is also given.

Delamare Deboutteville, Cl. 57041; and P.A. Chappuis (1957)

Bull.Inst.franc.Afr.noire, 19:491-500

Contribution à l'étude de la faune interstitielle marine des Côtes d'Afrique. I. Hystacocarides, copépodes et isopodes (Contribution to the study of the marine interstitial fauna of the African coasts. I. Mystacocarids, copepods and isopods)

Morphological notes.

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De Kimpe, P. (1957) 570410

<u>Bull.Agric.Congo Belge</u>, 48(1):105-52

<u>Le contrôle de la Jacinthe d'eau</u> (The control of the water Hyacinth)

A review of the development and destruction of the <u>Eichhornia crassipes</u> including the first results obtained in controlling it in the Belgian Congo.

Dollour, J.W. (1957)

<u>Proc.Amer.Soc.civ.Engrs</u>, 83, EMI,

(1138):24 p.

The boundary layer development in open channels

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Delamare Deboutteville, C. (1957) 570411

Vie et Milieu, 8(1):110

Le mystacocaride Derocheilocaris biscayensis sur les côtes du Portugal (The mystacocarid Derocheilocaris biscayensis on the coasts of Portugal)

de Loture, R. (1957)

Spec.sci.Rep.U.S.Fish Wildl.Serv.,

213:147 p.

History of great fishery of Newfoundland

A comprchensive review of the cod fishery. Describes socio-economic development and the fishing operations in detail.

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Délye, G. (1957) 570415

Bull.Inst.océanogr.Monaco, (1093:1-8

Crustacés décapodes récoltés au cours de la croisière du comité local d'océanographie et d'études des côtes d'Algerie aux îles Habibas (Crustaceans decapods collected during the cruise of the local committée of oceanography and studies of the coast of Algeria to the islands Habibas)

Gives the depths of the stations, nature of the bottom, list of other organisms collected with the decapeds, the abundance of which is indicated.

Department of Oceanography and 570418

Meteorology. A and M College
of Toxas (1957)

College Station, Toxas, (mimco), 7 p.

Publications and projects reports annual and technical 1956

List of reports published in 1956, dealing with many aspects of oceanography.

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Demond, J. (1957) 570416

Pacif.Sci., 11(3):275-341

Ilicronesian reef-associated gastropods

A synopsis of existing knowledge of the ecology and zoogeography of the organisms. It summarizes for each species the environmental conditions in which living specimens have been found, and it outlines the recent geographic occurrence of each species throughout the entire Indo-Pacific region.

Desakorn, R.T.N. (1957) 570419

Int.hydr.Rev., 34(2):15-8

Progrès réalisés par le service hydrographique Thailandais au cours des cinq dernières années (1952-1957)

(Progress achieved by the Thai hydrographic service in the course of the last five years (1952-1957))

Schedule of personnel sent overseas for training of development of establishment (and diagram of present structure), new equipment, and technical progress.

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De Ong, D.R. (1957) 570417

Reinheld Publishing Corp., New York,

334 p.

Chemistry and uses of pesticides

Desbrosses, P. (1957) 570420
Sci.Pêche, 46:1-2
Le merlan des eaux d'Irlande (The whiting of the Irish waters)

A note on the structure of the populations of whiting of the eastern and western coast of Ireland and coast of France.

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De Sylva, D.P. (1957) 570421
Bull.Mar.Sci.Gulf Caribb., 7(1):1-20
Studies on the age and growth of the
Atlantic sailfish, Istiopherus americanus
(Cuvier), using length-frequency curves

Analysis of 8630 specimens taken 1948-55
off S.Florida, W.Bahamas and the Gulf of
Mexico: growth in weight and length up
to 3 years illustrated.

Diaz-Piferrer, M. (1957) 570424
Paper presented at the Inter-Island

Marine Biological Conference, March
31 - April 6, 1957
Studies of marine algae in Cuba

Statement of efforts to reconstitute collegiate curricula relating to natural resources, and of current researches. Abstract in "Report by the Institute of Marine Biology, University of Puerto Rico".

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Dethior, G. (1957) 570422 Science, 125(3243):331-6 Communication by insects: physiology of dancing Dick, W.E. (1957) 570425
Butterworths Scientific Publications,
London

Atomic energy in agriculture

Includes account of uptake of radioactive material in food by damsel in Bikini Lagoon.

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Dexter, R.W. (1957) 570423 Bull.ecol.Soc.Amer., 38:100 The annual fluctuation of a freshwater jellyfish population with reference to climatic factors

Abstract of paper presented at the meeting of the Ecological Society of America, Indianapolis, December 27-29, 1957.

Dickie, L.M. and 570426
J.S. MacPhail (1957)

Progr.Rop.Atl.Cst Stas, (66):3-9

An experimental mechanical shellfishdigger. Fr

Ill. description and use of gear for Mya arenaria fishery of maritime previnces of Canada.

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Dictrich, G. (1957) 570430 Dieuzeide, R. (1957) **57**0427 Ber. dtsch. Komm. Meeresforsch., 14(4):256-Bull. Sta. Aquic. Pêche Castiglione, (8): 73-80 Schichtung und Zirkulation der Irminger-Les myxines (Myxine glutinosa L.) en See im Juni 1955 (Stratification and (The myxines (Myxine Moditérranée circulation of the Irminger Sea in June glutinosa L.) in the Mediterranean) An illustrated note on the occurrence Extensive charting and tabulation of data of the species in the Mediterranean. from cruises of ANTON DOHRN, description of water masses and of water circulation. M FAO: glk FAO:hr M Dictrich, G. (1957) 570431 570428 Dicuzeido, R. and (1957)Dtsch.hydrogr.Z., 10:39-61 J. Roland Ozeanographische Probleme der deutschen Algórie marit., 54:1-2 Forschungsfahrten im Internationalen Un poisson nouveau pour la Méditerranée Geophysikalischen Jahr 1957/58 "Ophichthys semicinctus" (A fish new (Oceanographic problems to be investigatfor the Mediterranean Sea "O. semicinctus") ed on the German research cruises during the International Geophysical Year 1957/ Reports recent new species and extensions 58) of known range. Bottom topography, subsurface and deep water circulation and circulation of bottom water. FAO: tl M FAO: sjh M 570432 Dictrich, G. (1957) 570429 Dicuzcide, R. and Gebr. Bornträger, Berlin-Nikolassec, 492 p. J. Roland (1957)Allgomoine Mooreskunde. Eine Einführung Bull.Sta.Aquic.Pôche Castiglione, (8): in die Ozeanographie (General oceanography. An introduction to Complement au catalogue des poissons des oceanography) câtes Algeriennes (Complement to the catalogue of fishes of the coast of . A textbook in oceanography. Algeria) Description with notes on edible value and methods of capture of Alepocophalus r stratus, Bathypterois dubius, Nemichthys scolopaccus, Callionymus festivus, and Cubiceps ismaelensis. FAO:tl II IMFAOshr

Dieuzeide, R. and 570433

J. Roland (1957)

Bull.Sta.Aquic.Pêche Castiglione, (8):

Etude biométrique de Sardina pilchardus Walb. et de Sardinella aurita C.V. capturées dans la baie de Castiglione (Biometric study of the Sardina pilchardus Walb. and of Sardinella aurita C.V. captured in the Bay of Castiglione)

A study of size, growth, age, longevity, sexual ration, weight, sexual development, fattening, morphometric and meristic characters.

FAO:hr

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Diolé, P. (1957) 570436

Pan Books Ltd., London, 191 p.

4000 years under the sea - Excursions in undersea archaeology

Illustrated popular account of aqualung diving for archaeological research; includes study of ancient ships and harbours, notes on rate of growth of encrusting organisms and other observations of marine life.

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A seiche movement and its effect on the

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Fogg, G.E. (1957) 570535 J.gon.Microbiol. (Symposium on plankton), 16:294-97

Relationship between metabolism and growth in plankton algae

Discussion on the growth phases in the culture, the importance of extracellular products on the growth, and comparison of the culture growth to the growth of natural populations.

Forest, J. (1957) 570538
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19:501-10

Mise au point sur les Brachynotus de Méditerranée et d'Afrique occidentale: Brachynotus sexdentatus Risso et Brachynotus atlanticus nov.sp.

(Description of Brachynotus of Mediterranean Sea and West Africa: Brachynotus sexdentatus Risso and Brachynotus atlanticus nov.sp.)

Discussion of the status of these species and description of the new species.

FiB:tl

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FAO:glk

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Folk, R.L. and W.C. Ward (1957) 570536

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Brazos River bar: a study in the significance of grain size parameters

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6:353-6

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Follmann, G. (1957) 570537, Planta, 48:393-417 Crown plasmolysis and the contraction of vacuoles. II. Plasmolysis in response to stimuli by marine plankton diatoms

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R.H. Hackman (1957)
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Application of ethylonediaminetetraacetic acid in the isolation of
crustacean chitin

Biochamistry of the cuticle of <u>Cancer</u> <u>paggrus</u>.

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Fried, Z. (1957) Fish.Bull., Haifa, (11):26-8 (Tuna fishing with the ring net). Ill. article.	<u>Iy</u>	Frost, W.E. (1957) Nature, Lond., 179:594 First record of the elver of the eel Anguilla nebulosa labiata Peters Based on a 1956 collection from Tanganyika which also included first elvers of Anguilla bicolor bicolor be recorded from mainland of Africa (second record for African fresh v	ers st c to
SJH:sjh	M	FiB:wad	F
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Frost, W.E. (1957) 5705591 Piscator, (38):3 p. A note on cels (Anguilla spp.)

D.D. Potter (1957)Nature, Lond., 180(4581):342-3 Mechanism of nerve-impulse transmission at a crayfish synapse

Furshpan, E.J. and

Notes on the identity and distribution of eels in the Zambesi river system based on collections made in 1954-56.

Experiments with Astacus fluviatilis to test the hypothesis that a one-way transmission process can take place by means of an 'electrical' mechanism in which the local currents can cross the synaptic membrane in only one direction.

SJH: wad

GLK:glk

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Fukuhara, E. (1957) 5705601 Bull. Hokkaido reg. Fish. Res. Lab.,

Furth, F.R. (1957) 570563 Res. Rcv. U. S. Off. nav. Res., Anniversary Issue, :14-6

(16):70-3

The Navy's stake in underwater acoustics

(Ecological studies on Iridophycus cornucopiae (P. et R.) Setch. et Gardn. 6. On the shedding of the spores (I)) Ni

The importance of sound propagation investigations in the sea.

Laboratory studies throughout 1956 showed hardly any diurnal variation in shedding rate, nor any effect of tides or temperature.

FAO:sjh

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Furnestin, M.L. (1957) 570561: Rev. Trav. Inst. Pôchos marit., 21(1/2), 356 p.

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Chaetognathes et zooplancton du sceteur Atlantique marocain (Chaetognaths and zooplankton of the Atlantic Moroccan region)

A review; ill., with full bibliography.

Description of the environment and list of the species encountered; ecological observations on certain groups with detailed account of the morphology and ecology of the chaetognaths. Discussion of distribution of the zooplankton and of the influence of hydrographical factors on the annual planktonic cycle, with definition of plankton indicators of Moroccan waters. FaOtglk

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SJH

FAO: sjh

(E.D. Le Cren).

Gameson, A.L.R. (1957) 570571 <u>Challenger Soc.</u>, 3(9):32 The Thames estuary and its pollution. III. Rate of solution of atmospheric oxygen

Abstr. of paper read at Joint Meeting of the Water Pollution Research Laboratory, Stevenage; and Zoological Society of London, Regent's Park, London: 24th and 25th January, 1957. Content as per title.

ing cal Garnaud, J. (1957) 570574
Bull.Inst.océanogr.Monaco, 1096:1-10
Ethologie de Dascyllus trimaculatus
(Rüppell) (Ethology of Dascyllus trimaculatus (Rüppell))

Contains information on behaviour, spawning, eggs and larvae collected during four years of study of the species in an aquarium.

SJH: efa

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FAO:hr

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Ganapati, P.N. and 570572
D.V. Subba Rao (1957)
Curr.Sci., 26(11):347-8
On upwelling and productivity of the waters off Lawson's Bay,
Waltair

Records with bathythormograph readings, the variations in salinity, phosphates, silicates, phytoplankton volume and plant pigment value on the 10 fathom line from January to April during progressive rise and fall of upwelling to demonstrate the

Garrick, J.A.F. (1957) 570575

Bull.Mus.comp.Zool.Harv., 116:171-90

Studies on New Zealand Masmobranchii.

Part VI. Two new species of Etmopterus
from New Zealand

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570572 (Card 2)

latter's effect on near shore waters.

Garrod, D.J. (1957) 570576 E.A.F.R.O. Pamphlet, (1) A review of Lake Victoria fishery service records 1951-1956

Brief survey of catch records and notes on individual species and fish landings taken by L.V.F.S.

FAO:tjj

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(1957)Garrod, D.J. 570577 Gehringer, J.W. (1957) Fish.Bull., U.S., 110:139-71 570580 Suppl. Publ. E. Afr. Fish. Res. Org., (2), 17 p. An analysis of records of gillnet Observations on the development of the fishing in Pilkington Bay, Lake Victoria Atlantic sailfish Istiophorus americanus (Cuvier), with notes on an unidentified Describes results of fishing operations, species of Istiophorid Dec. 1954 to Nov. 1956, designed to assess the composition of fish populations Content as per title. GLK: wa.d. FA0: efa M Gasch, A. (1957) 570578 Goitler, L. (1957) 570581 Öst.Fisch., 10(6/7):80-90 Biol.Rev., 32(3):261-95 Die Zatorer Methode der wirksamen Die sexuelle Fortpflanzung der pennaten Bekämpfung der Bauchwassersucht der Diatomeen (Sexual propagation of (The Zator method Karpfen pennate Diatoms) successfully applied against ascites of carp) Description of copulation mechanism, sex differentiation, sex determination Method described by Z. Rychlicki and and various developmental questions. St. Zarnecki in Z. Fisch. FAO: tl FAO: tl MF Gauld, D.T. (1957) 570579 Geoghegan, M.J. (1957) 570582 Nature, Lond., 179:325-6 New Phytol., 56(1):71-80 A peritrophic membrane in calanoid The effect of some substituted methylureas copepods on the respiration of Chlorella vulgaris var. viridis Discusses formation and function of membrane and describes structure and Account of studies on the effect of movements of mid-gut. composition of culture medium on inhibitory effects of the compounds on growth and respiration of this sp. GLK: efa MF FAO: efa F

George, E.A. (1957) 570583

J.Mar.biol.Ass.U.K., 36(1):111-14

A note on Stichococcus bacillaris Naeg. and some species of Chlorella as marine algae

Several strains of Stichococcus bacillaris
Naeg. and of the marine S. cylindricus
Butcher were all found to fit morphologically in Naegeli's species. Both the marine and non-marine strains grow well in either fresh-or sea-water media. S. cylindricus must therefore be regarded as a synonym of S. bacillaris. Three marine Chlorella strains including C. ovalis
Butcher and C. stigmatophora Butcher were also found to be quite unexacting about salinity. The significance of small differences, particularly of growth rate, is discussed with regard to non-sexual organisms. HR:hr

George, F. (1957) 570584 Proc.U.N.reg.cartogr.Conf.Asia and Far E.,

2:85-9
Physical background surveys for a study of natural resources for agriculture

George, M.G. (1957) 570586 Curr.Sci., 26(12):398-9 On the swim-bladder of Anabas testudineus (Bloch)

Anatomical description.

FAO:glk

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Gerking, S.D. (1957) 570587

Ecology, 38:219-26

A method of sampling the littoral macrofauna and its application

The purpose of this work is to describe and test a method of separating the benthic macrofauna from the phytomacrofauna in the littoral zone of a lake, by removing the plants from a square frame and sampling the benthos in the same area with an Ekman dredge.

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FAO:sjh

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George, J.L., R.F. Darsie, Jr. 570585 and P.F. Springer (1957) J. Wildlife Mgmt, 21(1):42-51 Effects on wildlife of aerial applications of Strobane, DDT, and BHC to tidal marshes in Delaware

A study to ascertain the effect on wildlife, if any, of the use of a new insecticide, Strobane, for mosquito control on tideland areas. Comparisons were made with DDT and BHC. Results were measured in terms of mortalities and of avoidance reaction of animals to presence of the insecticide. Gessner, F. (1957) 570588 VEB Deutscher Verlag der Wissenschaften, Borlin, 426 p. Moer und Strand (The sea and the

Textbook on marine ecology with special

Textbook on marine ecology with special emphasis on the North Sea and the Baltic.

FAO:glk

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570589 Gibor, A. (1957) 570592 Geyer, J.C. and G.T. Bryant (1957) Nature Lond., 179(4573):1304 Paper presented at the Thirty-Eighth Conversion of phytoplankton to Annual Meeting, Washington, D.C., zooplankton April 29 - May 2, 1957 Determination of food coefficient of The travel time of radioactive wastes in natural waters Artemia with different amounts of available food. M GLK: glk M 570590 Giger, F. and 570593 Gibbs, R.H. (1957) Tulane Stud. Zool., 5:175-203 W. Einsele (1957) Cyprinid fishes of the subgenus Öst.Fisch., 10(6/7):77-80 Cyprinella of Notropis. III. Variation Bericht über den Fang einer riesigen Bachforelle, die Ergebnisse ihrer and subspecies of Notropis venustus fischerei-biologischen Untersuchung und (Girard) über eine Methode zur Wiederbelebung Notropis venustus is redescribed and its ersticktor Fische (Report on the three subspecies N. v. venustus, N. v. catch of giant trout (Salmo fario), cercostigma and N. v. stigmaturus are the results of its biological characterized and their synonyms given examination, and a method for the together with the distribution of their reanimation of suffocated fish) component five races. Content as per title. F FAO:hr FAO: efa 570591 Giletti, B.J. and 570594 Gibbs, R.H., Jr. (1957) Deep-Sea Res., 4(4):230-7 F. Bazan (1957) Paper presented at the Thirty-Eighth A taxonomic analysis of Myctophum affine Annual Meeting, Washington, D.C., and M. nitidulum, two lantern-fishes previously synonymized, in the western April 29 - May 2, 1957 North Atlantic Near-surface ocean circulation from tritium measurements Content as per title. FAO: ofa. M M

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Gilis, C. (1957) Zeewetenschappelijk Instituut, Oos (1):30 p. De Haringcampagne 1956-57 (24 juli 19 januari 1957) (The herring 1956-57 (24 July 1956 - 19 January Fr Information on the fisheries and olength, composition, weight, matur age, growth, vertebrae number of t catch.	1956 - season 1957)}	Gladkov, N.A. (1957) C.R.Acad.Sci.U.R.S.S., 112:159 (New data concerning vertebrates of Arctic Yakutia (the Tixy bay)).	570598 f Ru
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Gillard, A. (1957) Résult.sci.Explor.hydrobiol.Tangan 3(6) Rotifères (Rotifers) A catalogue of 62 species of rotif including three new species, 20 new forms for the Belgian Congo fauna, several not previously recorded in Africa.	ers W and	Glaessner, M.F. (1957) Evolution, 11:178-84 Evolutionary trends in crustacea (Malacostraca) An outline of genetic relations a their interpretation.	570599
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Gillman, T. and S.S. Naidoo (1957) Nature, Lond., 179(4566):904-5 In vitro effects of heparin and calions on lipaemic serum	570597	Glover, R.C. (1957) Penn.Angler, 26(3):2-6 There are more smalt in Pennsylva future	
Brief review of subject and account experiments on the clearing action heparin.		History of introduction (Osmerus life history, fishing, etc.	mordax),
GLK:efa	F	GLK: wad	F

Godfrey, H. (1957) 570601

J.Fish.Res.Bd Canada, 14(2):153-64

Mortalities among developing trout and salmon ova following shock by direct-current electrical fishing gear

Account of tests to establish precautionary measures to prevent damaging eggs when using such apparatus in waters of similar conductivity.

Goel, P.S. et al. (1957) 570604

Deep-Sea Res., 4(3):202-10

The beryllium-10 concentration in deepsea sediments

The cosmic-ray-produced radioactive isotope, ¹⁰Be (half-life 2.7 million years) has been discovered in the upper and lower portions of a 15 m long core from the sediment of the Pacific Ocean. A comparatively simple chemical procedure for its extraction has been developed.

GLK: efa

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Godfrey, H. (1957) 57060 Progr.Rep.Atl.Cst Sta., (67):19-22 Feeding of eels in four New Brunswick salmon streams

Electrical sampling carried out 7-8/52; stomach contents analysis; eels as predators on salmon fry.

Gokhale, S.V. (1957) 570605
Indian J.Fish., 4(1):92-112
Seasonal histological changes in the genads of the whiting (Gadus merlangus L.) and the Norway pout (G. esmarkii Nilsson)

Macroscopic description, general histology and internal changes in the gonads during the reproductive cycle; with discussion of interstitial tissue, origin of germ cells and spermatogenesis in the testes and of the "corpus luteum" and follicular degeneration in the ovary; sea temperature and development of gonadial tissue.

FAO:sjh

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GLK:glk

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Goedecke, E. (1957) 570603 Seewart, 18:9-22 Das merkwürdige Verhalten der Eiswinter 1953/54 bis 1955/56 (The remarkable behaviour of the ice-winters 1953/54-1955/ 56)

Golvan, Y.J. (1957) 570606
Rósult.sci.Explor.hydrobiol.Kivu, Eduard
and Albort, 3(2):53-64
Acanthocephala des poissons (Acanthocephala of fishes)

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Gong, J.K. et al. (1957) 570607 Proc.Soc.exp.biol.Med., 95:451-4 Uptake of fission products and neutroninduced radionuclides by the clam

Gordan, J. (1957) 570610

Bull.Amer.Mus.nat.Hist., 112(4):279-393

A bibliography of the order Mysidacea

1180 refs. from 1776 to end of 1955, arranged alphabetically by authors, and indexed by genera (grouped in families and including cross-references to synonyms) and by ten general subjects (including "Distribution" subdivided into "Fresh and brackish water" and "Oceanic" and then further into geographical regions).

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Gonse, P.H. (1957) 570608

Biochim.biophys.Acta, 24:267-278

L'ovogenèse chez Phascolosoma vulgare.

III. Respiration exogène et endogène de
l'ovocyte - Effet de l'eau de mer
(Ovogenesis in Phascolosoma vulgare.

III. Exogenous and endogenous
respiration of oocytes. Effect of sea
water)

Gordon, I. (1957) 570611

Bull.Brit.Mus.(Zool.), 5(2):29-47

On Spelaeogriphus, a new cavernicolous crustacean from South Africa

The oxygen consumption of the coelomic occytes, at all stages of their growth, have been studied with the diver technique. Three levels of oxidation have been recognized: endogenous respiration, fundamental respiration, and extra-respiration. The significance of exogenous and endogenous conditions in occytes and eggs is discussed.

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570609

Gorbman, A. (1957) Copeia, (1):41-3

The thyroid gland of Typhlomolge rathbuni

The finding of nearly 100 thyroidal follicles in each of two Typhlomolge shows that the species is not athyroid as indicated by other authors. On morphological grounds the thyroidal tissue appears inactive.

Gordon, M. (1957) 570612

In "The Physiology of Fishes". Vol. II.
Behaviour. Edited by M.E. Brown,
Academic Press Inc., Publishers,
New York, pp. 431-501
Physiological genetics of fishes

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570613 Gordon, M.S. (1957) Biol.Bull., Wood's Hole, 112(1):28-33 Observations on osmoregulation in the Arctic char (Salvelinus alpinus L.)

Data are presented on plasma freezing point, chloride and potassium, muscle solids, chloride, and potassium. Physiological differences between populations of char are indicated.

FAO:glk

HR:glk

Gorham, E. (1957)

Limnol. Oceanogr., 2(1):12-21

in Halifax County, Nova Scotia

The chemical composition of lake waters

ions, Na, K, Ca, Mg, HCO₃, Cl, SO₄, and

Analyses for concentrations of total

dissolved organic carbon, as well as

surface lake waters collected from heathy spruce forest in Halifax County, Nova Scotia, during December 1955. Main factors governing chemical composition are discussed.

optical density, pH, and specific conduotivity, are presented for twenty-three

Gordon, S.M. and R.H. Backus

(1957)Copeia, (1):17-20

New records of Labrador fishes with special reference to those of Hebron Fjord

Distributional and systematic notes on the species collected with remarks on the relative abundances of fishes in Hebron Fjord.

570617

Gorham, E. (1957) <u>Limnol.Oceanogr.</u>, 2(1):22-7 The ionic composition of some lowland

lake waters from Cheshire, England

Analyses are presented for the major dissolved constituents in waters from nine Choshire meres. Degree of chemical aberrance of two of these lakes is

Recent collections of the California

Reports collections that fill gaps in distribution, extend the range, and

limbless lizard, Anniella pulchra

allow comment on biosystematics.

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Rico".

HR:glk

Gorman, J. (1957)

Copeia, (2):148-50

discussed.

570618

Goreau, T. (1957)

570615

Paper presented at the Inter-Island Marine Biological Conference, April 6, 1957

Calcification in reef corals

Preliminary investigations to determine calcification rates under conditions varying as to light intensity; examination of the role of Zooxanthellae and carbonic anhydrase. Abstract in "Report by the Institute of Marine Biology, University of Puerto

HR: glk

HR:efa

Gorsky, B. (1957) 570622 570619 Gottlieb, E. (1957)Little, Brown and Company, Boston and Fish.Bull., Haifa, (11):13-5, 18-20 Toronto, 305 p. (Ago and growth studies of the yellow Vastness of the sea striped mullet (Upeneus moluccensis)). Study of otoliths and length frequencies in Eastern Mediterranean trout catches, 1955 and 1956. Proposal for mesh regulation. M SJH: sjh M Gosner, L.G. and 570620 Gotto, R.V. (1957) 570623 I.H. Black (1957) <u>Irish Nat.J.</u>, 12:138 Copeia, (1):31-6 A cyclopoid copeped new to British Larval development in New Jersey Hylidae waters, with a note on its structure Study of the variation in diagnostic Lichomolgus marginatus on Ascidia characters of larvae of Acris gryllus, virginea in Strangford Lough, Co. Down. crepitans, Pseudacris nigrita feriarum, Hyla andersoni, H. crucifer, H. versicolor versicolor. HR:hr F :jae Gottlieb, E. (1957) 570621. Gougenheim, M.A. (1957) 570624 Borgon (typescript) Int. hydr. Rev., 34(2):103-10 On the dynamics of the population of coal-Un astrolabe à prisme de haute précision fish, Gadus virens L. in Nerwegian waters. (A prism astrolabe of high precision) A report on the investigations carried out in the Institute of Marine Roscarch in Description of the apparatus. Bergen as a holder of UNESCO Fellowship in Marine Biology A report on a review of data filed at the Institute of Marine Rosearch, Bergen, Norway. Yields; reproduction, growth and mortality rates; long-term assessments of yield as functions of fishing intensity and selectivity. SJHssil FAO:glk M

Government Guano Islands 570625 Grainger, J.N.R. (1957) Division (1957)Irish Nat.J., 12(5):129-31 Comm. Industr., 15:299-312 Further observations on the planktonic Annual report for the period 1st copepods of Irish lakes September, 1955 to 31st August, 1956 Species of Diaptomus in Cork and Kerry Reports on guano production and lakes. distribution, sealing, penguins and protection of seabirds and seals. FAO:sjh \mathbf{F} :jae Graham, J.B. et al. (ed.) (1957) 570626 Grassl, E.F. (1957) 570629 American Association for the Advancement Progr.Fish Cult., 19(2):85-8 of Science, Washington 5, D.C., 141 p. Possible value of continuous feeding of Water for industry medicated dry diets to prevent and control pathogens in hatchery-reared Describes results obtained in treating furunculosis in Salvelinus fontinalis with Aureomycin MF WAD: wad \mathbf{F} Graham, M. (1957) Graves, II.E. (1957) 570630 570627 Bol. Comp. adm. Guano, 33(7):5-6 Nature, Lond., 180:410 Dr. Harold Thompson El ano 1955 - Anomalías en el tiempo de superficie sobre las costas del Pacífico en 1955 (The year 1955 - Anomalies An obituary, with a review of his contributions to fisheries and marine in the surface weather on the Pacific sciences. · coast in 1955) A meteorological study encompassing analyses of temperatures and winds in western South America. FAO:hr M W GLK:sjh

FAO/59/6/4794

1: Suppl. 105

Gray, I.E. (1957) 570631 Biol. Bull. . Wood's Hole, 112(1):34-42 A comparative study of the gill area of crabs

A comparative study has been made of the size of the gill areas of 16 spp. of brachyuran crabs from six families and representing land, intertidal, and wholly aquatic habitats. The size of the gill area is correlated with both habitat and metabolic activity.

Green, J. (1957) New Biol., 23:48-64 Daphnia - The water flea

Review of the morphology, life history and behaviour of Daphnia.

FAO:glk

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GLK:t1

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570634

Green, J. (1957) J.Mar.biol.Ass.U.K., 36(1):41-7 570632 The growth of Scrobicularia plana (Da Costa) in the Gwendraeth estuary

Populations of Scrobicularia plana with densities up to 1025 per m2 are found in tion of Cottus aleuticus in Karluk the Gwendraeth estuary. In a region where the population density was about 500 per m it was found that some specimens lived for 16-18 years and reached a length of 54 mm. An approximate growth curve is given. There is very little successful settlement of spat in the sampling area.

Greenbank, J. (1957) Copeia, (2):157 570635 Aggregational behaviour in a freshwater sculpin

Account of observation on the congrega-Lake, Kodiak Island.

HR:hr

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HR:efa

Green, J. (1957) 570633 Naturo, Lond., 179:432 Osmoregulation in Asplanchna priodonta

Time pur contraction of the complex contractile vesicle of this rotifer lengthens with increasing salinity.

Greenbank, J. (1957) 570636 Spec.sci.Rep.U.S.Fish Wildl.Serv., (202):59 p.

Creel census on the upper Mississippi river

! Presents the data obtained from the , census and the analysis of these with regard to catch composition, fishing success, and the influence of certain factors (fishing pressure, bait, time of day, sex of fishermen, water temperature, changes in water level, weather, depth of snow).

GIM: mlk

FAO:glk

Greenwood, M.R. (1957) 570637 Comm. Fish. Rev., 19:1-10 Bottom trawling exploration in the Strait of Juan de Fuca - February to March 1956

Some clear trawling areas were found but results were generally poor. Dogfish (Squalus suckleyi) and ratfish (Hydrolagus colliei) dominated the catch but some lingcod (Ophicdon elongatus) and cod (Gadus macrocephalus) were caught together with a few rockfish (Sebastodes sp.) and flatfishes. Four species of shrimp (Pandalus sp.) were caught by beam trawl in small quantities.

FAO:sjh

FAO:tl

Grenager, B. (1957) .

Nytt Mag. Bot., 5:41-60

Algological observations from the

Investigation on the pollution tolerance by different species of sessile algae.

polluted area of the Oslofjord

(Incl. notes on hydrography and

pollution, floral associations and '

horizontal distribution of species).

M.

570640

Greenwood, P.H. (1957) 5706381 Bull.Brit.Mus.(Nat.Hist.)Zool., 5:76-97 A revision of the Lake Victoria Haplochromis species (Pisces: Cichlidae) -Part II. H. sauvagei (Pfoffer), H. prodromus (Trewavas), H. granti Blgr. and H. xenognathus sp. n.

Griliches, Z. (1957) 570641 J.Fm Econ., 39(1):8-20 Specification bias in estimates of production functions

Describes application of method relevant to problems of fisheries management.

570639

FAO: sjh

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570642

Greenwood, P.H. (1957) Uganda J., 21

The fishes of Uganda - III

Grimes, E.D. (1957) Idaho Wildl. Rev., 9(5):10-3

Trout diet requirements

Popular article on natural foods and hatching feeding.

WAD: sjh

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Grisebach, H., R.C. Fuller 570643 Grusov, E.N. (1957)570646 (1957)and M. Calvin Zoul.Zh., 36(6):852-62 Biochim.biophys.Acta, 23(1):34-42 A new end parasitic mollusc - Molpadicola Metabolism of thioctic acid in algae orientalis, gen. n., sp. n., (Family Paedophoropodidae) Thioctic acid labelled with sulphur-35 has been prepared and its metabolism by Morphological description of the mollusc algae has been studied. It is converted and discussion of its taxonomic status. by the algae into a number of forms, all of which upon hydrolisis will yield either the disulfide or its sulfoxide. FAO:glk MF FAO:glk M Grosmaire, P. (1957) 570644 Guareschi, C. (1957) 570647 Bois For Trop., 54 Ric.sci., 27:2140-3 La pêche sur le fleuve Sénégal La Stazione di Biologia Marina del (Fisheries on the Senegal River) Tirreno dell'Università di Cagliari (The Marine Biological Station of the Tyrrhenian Sea, Cagliari University) Describes the location, equipment and current programme (in planktonology) of the station and projected investigations. F FAO:glk M 570645 Gross, W.J. (1957) 570648 Gudimovich, P.K. (1957) Biol.Bull., Wood's Hole, 112(1):43-62 Priroda, Moskva, 3:127 An analysis of response to osmotic Godovoi ratsion tuntsa v Chernom more (Annual consumption of food by tunny in stress in selected decaped Crustacea the Black Sea) Determinations on Birgus latro Linn., Emerita analoga, Rathbun, and Pachygrapsus crassipes Randall. Describes osmo-regulation as a function of time; discusses evidence on various osmoregulatory mechanisms and the metabolic work in increased osmotic stress.

FAO/59/5/4794

FAO: glk

Guerrier, J.P. and 570649
M.H. Schultz (1957)
Bull.Can.Wildl.Mgmt, 3(5), 12 p.
Studies of lake trout and common whiterish in Waterton Lakes, Waterton Lakes
N tional Park, Alberta

Guilcher, A. (1957)

Ouessant Island)

Norois, 4(15)
Quelques aspects et problèmes morphologiques et sédimentologiques de l'île d'Ouessant (Some morphologic and sedimental aspects and problems of

F

M

Gug, M. (1957) 570650
Quart.Bull.S.Pacif.Comm., 7(3):19-21
Mother-of-pearl industry in French
Occania

Gulf States Marine Fisheries 570653
Commission (1957)
New Orleans 16, Louisiana, 33 p.

Eighth annual report 1956-1957 to the
Congress of the United States and to
the governors and legislators of
Alabama, Florida, Louisiana, Mississippi,
Texas

Lists of commissions and committee members; financial statement; account of pertinent research activities by the commission itself and by the States and the U.S. Fish and Wildlife Service.

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FAO:sjh

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Guignot, F. (1957) 570651
Résult.sci.Explor.hydrobiol.Kivu, Eduard
and Albert, 3(2):131-69
Haliplidae et Dytiscidae (Colcoptera
hydroganthares)

Gulland, J. (1957) 570652 Fish.Bull.F.A.O., 10(4):157-81 Sampling problems and methods in fisherics research

A simple introduction to the principles of tackling sampling problems as they arise in fish population studies, particularly with regard to the catches of commercial vessels, and their size and age compositions. Some other problems likely to be met in fisheries biological studies are touched on, but the principles discussed are generally applicable.

H.

SJH:sjh

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Guntor, G. (1957) 570655 570658 Gunter, G. and Copeia, (1):13-6 R.W. Monzel (1957) Produminance of the young among marine Nautilus, 70(3):84-7 fishes found in fresh water The crown conch, Melongena corona, as a predator upon the Virginia oyster Marine fishes in low salinities are smaller than those of the same species Predation on Crassostrea virginica on in saltier waters and constitute the U.S.A., Atlantic coast; mode of feeding invaders of fresh water. Differences in on this and other species; observations the relations of young and old animals by fishermen and in aquaria. to salinity of the water must be taken into account in studies of euryhalinity. MF FiB:sjh M HR: hr Gunter, G. (1957) 570656 Haga, S. et al. (1957) 570659 Sea Frontiers, 3:80-6 Bull. Hoklaido reg. Fish. Res. Lab., 15:23-Mississippi's only marine laboratory (Growth and age determination of "Komai", Description of the Gulf Coast Research Eleginus gracilis (Tilesius)). Laboratory, Ocean Springs, and its activities. Samples of trawlers catch in Hokkaido, winter 1950-51. Growth in longth and weight estimated from length frequency distribution and scale and otolith rings. HR: tl M FAO:sjh Gunter, G. (1957) System.Zool., 6:98-100 570657 Hagen, W., Jr. (1957) 570660 Progr. Fish Cult., 19(1):32-9 Misuse of generic names of shrimp Fish foods purchased for federal (Family Penaeidae) hatcheries in 1955, compared with 1945

A discussion of the spelling of the generic name Penaeus.

and 1949

A review showing increasing emphasis on use of dry meals, fish products and pellets for salmonid feeding.

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WAD: wad

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Hagerman, D.D., F.M. Wellington 570661 and C.A. Villee (1957) Biol.Bull., Wood's Hole, 112:180-3 Estrogens in marine invertebrates

Describes enzymatic method of assay for estrogens suitable for use with crude tissue extracts. States that only the ovaries of Mactra (Spisula) solidissima contain estrogenic material.

Halo, L.J. (1957) 570664 Proc.R.phys.Soc.Edinb., 26(1):19-24 The problem of keeping marine animals

The normal environment of marine animals is surveyed particularly from the point of view of their being kept in captivity, and a successful aquarium is described.

FAO:efa

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SJH:sjh

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Hagihara, B. et al. (1957) 570662

Nature, Lond, 179(4553):249-50

Crystallization of cytochrome c from fish

Techniques of preparation from heart muscle of Katsuwonus vagans, and Thynnus alalunga. Properties are described.

Hall, J.C. and 570665
H.I. Battle (1957)
Canad.J.Res.(Zool.), 35(5):593-601
Respiratory movements and endurance of frogs at low pressures

Contains the results of investigations of Rana pipiens, R. clamitans and R. sylvatica respiratory movements under reduced pressure, endurance at various pressures at normal atmospheric pressure, and reduced partial pressure of oxygen.

GLK:glk

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FAO:hr

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Haines, R.G. (1957) 570663 World Fish., October 1957,:84-6 Asdics for fish detection. Part I

First part of an ill. article which defines problems and possibilities of horizontal echo-ranging from fisherman's point of view.

Halldal, P. (1957) 570666

Nature, Lond., 179:215-6

Calcium and magnesium ions in phototaxis
of motile green algae

Quantitative investigations on the effect of Ca++ on the negative phototaxix and Mg++ on the positive ion. The Ca/Mg ratio where no phototactic movement occurs is also determined.

SJH:sjh

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GLK: tl

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Hallock, R.J., D.H. Fry, Jr. 570667 and D.A. La Faunce (1957) Calif.Fish Game, 43:271-98 The use of wire fyke traps to estimate the runs of adult salmon and steelhead in the Sacramento river

Ill. description of construction and peration of the traps for Oncorhynchus tsha sytscha and Salmo g. gairdneri. Catches of these and other spp. per unit effort.

Hamilton, E.L. (1957) 570670
Sci.Mon., N.Y., 85:294-314
The last geographic frontier: the seafloor

Illustrated review of sea-bed studios; gravity seismic and heat flow measurements; features of the Atlantic and Pacific floors described; trenches. fracture zones, seamounts and ranges; coral atoll formation; deep-sea stratigraphy; free diving; deep-sea photography; the bathyscaphe; bibliography of 70 references.

SJH:sjh

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FAO:sjh

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Halver, J.E. (1957) 570668

J.Nutrit., 62:225-43

Nutrition of salmonoid fishes. III.

Water-soluble vitamin requirements of chinook salmon

Feeding experiments on <u>Oncorhynchus</u> tshawytscha.

Hamming, R.W. (1957) 570671 Sci.Mon., N.Y., 85:169-75 Controlling the digital computer

An account of the possibilities of their use; popularization of communications theory; coding theory and programming.

FAO:sjh

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FAO:sjh

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Hamdorf, K. (1957) 570669 Kurse Hitt.Inst.Fisch Biol.Univ.Hamburg, (7):1-22

Das allometrische Wachstum der Wirtelsäule der Heringslarve sowie dessen Auswirkung auf die Verlagerung der paarigen und unpaarigen Flossen (The allometric growth of vertebrae in herring larvae and its influence on the shifting of paried and unparied fins)

Analysis of the absolute length of groups of vertebrae in fish of various sizes from 29.5 mm to 200.0 mm, with comparison of the growth revealed and of the shift in relative position of all fins presumably induced by the lemonstrated allometry.

FAO:glk

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Hammond, R.J. (1957) 570672
H.M.S.O. and Longmans, Green and Co.,
848 p.
Food

Includes survey of fish production and consumption in Britain, 1939-1945.

FAO:sjh

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Hamon, M. (1957) 570673

Bull.Soc, Hist.nat.Afr.N., 48(3-4):221-33

Note sur Janickina pigmentifera (Grassi
1881) amibo parasite du segment génital
mâle de Sagitta (A note on Janickina
pigmentifera (Grassi 1881) amoeba
parasite of the male genital segment of
Sagitta)

An investigation of the pigments characteristic of the species.

Hardon Jones, F.R. (1957) 570676

In "The Physiology of Fishes". Vol.II.
Behaviour. Edited by M.E. Brown,
Academic Press Inc., Publishers,
New York, pp. 305-22
The swimbladder

FAO:hr

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Hanks, J.E. (1957) 570674

Biol.Bull.Wood's Hole, 112(3):330-5

The rate of feeding of the common oyster drill, Urosalpinx cinerea (Say), at controlled water temperatures

Laboratory investigation on the influence of the temperature on the intensity of feeding.

Harding, J.P. (1957) 570677
Résult.sci.Explor.hydrobiol.Tanganyka,
3(6):53-8
Crustacea: Cladocera

A systematic account of the species from lake Tanganyika, lake Kivu and a pond near lake Edward.

FAO:tl

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FiB:hr

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Hanna, H.M. (1957) 570675

Proc.R.Ent.Soc.Lond., (A), 32:47-52

Observations on case-building by the larvae of Limnephilus politus McLachlan and L. marmoratus Curtis (Trichoptera: Limnephilidae)

The case of L. politus is started by the construction of a belt; that of L. marmoratus by a ventral plate and square. The growth of the case parallels that of the larva and increase in size is achieved by adding to the anterior end and cutting away from the posterior end.

Hargis, W.J., Jr. (1957) 570678
LinnolOceanogr., 2(1):41-2
A rapid live-sexing technique for

A rapid live-sexing technique for Urosalpinx cinerea and Eupleura caudata, with notes on previous methods

Describes the technique and methods of testing its reliability.

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Harmer, S.F. (1957) 570679

Monogr. Uitkomst. Zool. Gebied Nederl. O.
Indie, 38:641-1147 (Leiden: E.J. Brill)

The Polyzoa of the SIBOGA expedition.

Part 4: Cheilostomata Ascophora, II

(Ascophora, except Reteporidae, with additions to Part II, Anasca)

Hart, J.S. (1957) 570682 Canad.J.Res.(Zool.), 35:195-200 Soasonal changes in CO₂ sensitivity and blood circulation in certain freshwater fishes

Asphyxiation level of oxygen at various levels of CO₂ on the Micropterus salmoides, Ictalurus lacustris punctatus and Ameiurus nebulosus marmoratus decreased with warming of the water; blood pressure of the first two species fell with seasonal change from winter to summer temperature.

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FAO:hr

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Harris, K.E. (1957) 570680 Int.hydr.Rev., 34(2):111-5 Navigation par perspective (Navigation by perspective)

Principle and practical details of the system.

Hartman, 0. (1957) 570683 Allan Hancock Pacif. Exped., 15(3):211-393

Orbiniidae, Apistobranchidae, Paraonidae and Longosomidae

Discussion of the systematic with notes on the ecology, geographic distribution, reproduction and development.

FAO:glk

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FAO:tl

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Harrison, A.C. (1957) 570681

Cape Peninsula Publicity Ass. and Cape

Piscatorial Soc., Cape Town, 16 p.

Freshwater fishing in the Cape south western districts, South Africa (with notes on the eastern Cape)

Harvey, E.N. (1957) 570684

In "The Physiology of Fishes". Vol.II.

Behaviour. Edited by M.E. Brown,

Academic Press Inc., Publishers,

New York, pp. 345-66

The luminous organs of fishes

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Harvey, H.W. (1957) 570685

J.Mar.biol.Ass.U.K., 36(1):157-60

Bio-assay of nitrogen available to two species of phytoplankton in an off-shore water

A bio-assay of the nitrogen which was available to two phytoplankton species with their associated bacteria in an off-shore water is described. Of the organic nitrogen normally present in solution in sea water, an insignificant quantity appears to be available to the plant-bacteria community.

Hasler, A.D., W.J. Wisby 570688 and J.A. Larsen (1957)

Res.Rev.U.S.Off.nav.Res., Anniversary

Issue,:32-5

Salmon, science, and a sense of smell

Popular review of the migration problems of Pacific salmons.

HR: tl

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WAD: tl

ME

Hase, E., Y. Morimura 570686 and H. Tamiya (1957) Arch.Biochem., 69:149-65 Some data on the growth physiology of Chlorella studied by the technique of synchronous culture Haslett, A.W. (1957) 570689
Sci.News, Harmondsworth, (43):114-5
Research report

Brief account of findings regarding "Choice of spawning sites by trout" reported by T.A. Stuart (1956).

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GLK:tl

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Hasler, A.D. (1957) 570687

In "The Physiology of Fishes". Vol.II.
Behaviour. Edited by M.E. Brown,
Academic Press Inc., Publishers,
New York, pp. 187-209
The sense organs. Part III. Olfactory
and gustatory senses of fishes

Haslett, A.W. (1957) 570690
Sci.News, Harmondsworth, (45): 115-7
Research report - Below the Gulf Stream

Review of the article in Admiralty Bulletin, (90), May, 1957. Note on deep current measurements in the Gulf Stream system.

FAO

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GLK:tl

Hatch, R.W. (1957) 570691

N.Y.Fish Game J., 4(1):69-87

Success of natural spawning of rainbow trout in the Finger Lakes region of New York

Haven, D.S. (1957) 570694

Ecology, 38:88-97

Distribution, growth and availability
of juvenile croaker, Micropogon
undulatus, in Virginia

Gives statistical examination of reliability of catch data. Presents and discusses evidence on place and time of spawning, growth, seasonal variations in the pattern of distribution, and on absolute abundance.

F

GLK:glk

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Hatch, R.W. (1957) 570692 Progr.Fish Cult., 19(2):89-91 Relative sensitivity of salmonids to DDT

Describes experiments using <u>Salmo</u> salar, <u>S. gairdneri</u> and <u>Salvelinus</u> fontinalis.

Hayes, F.R. (1957) 570695

J.Fish.Res.Bd Canada, 14(1):1-32

On the variation in bottom fauna and fish yield in relation to trophic level and lake dimension

Examination of the relation of area to depth. Discussion of the ways of studying fish productivity in lakes, and of trophic levels with reference to length of food chain. Examination of productivity index and of a proposed quality index, and of the relation between depth and productivity.

WAD: wad

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GLK:glk

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Hauge, H.V. (1957) 570693
Folia limnol.scand., (9):189 p.
Vangsvatn and some other lakes near Voss-A limnological survey in Western Norway

Report on an intensive survey covering a whole year: methods, descriptive and comparative limnology. Contains a bibliography of literature on Norwegian lakes up to 1st January 1957.

Haysom, N.M. (1957) 570696

<u>Ichthyol.Notes</u>, 1:139-44

Notes on some Queensland fishes

Short notes on species new to Queensland. The new species Ichthyscopus fasciatus is described; three species are added to the Australian list.

FAO: wad

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GLK: hr

Heady, E.O. (1957) 570697 i Heezen, B.C. (1957) 570700 J.Fm Econ., 39:360-9 Paper presented at the Thirty-Eighth Annual Meeting, Washington, D.C. Organization activities and critoria in obtaining and fitting technical April 29 - May 2, 1957 production functions Deep-sea physiographic provinces and crustal structures Incl. comments on initiating cooperative research between economists and physical scientists and considerations in selecting algebraic forms of functions. FAO:efa M 570698 Healey, E.G. (1957) Hofer, B. (1957) 570701 In "The Physiology of Fishes". Vol. II. Fish.Bull., Haifa, (14):10-1 Behaviour. Edited by M.E. Brown, (Limnological research in Britain and Academic Press Inc., Publishers, its practical application). New York, pp. 1-119 The nervous system FAO F MF SJH Heezen, B.C. (1957) 570699 Hela, I. (1957) 570702 Deep-Sea Res., 4:105-15 Geophysica, Helsinki, 5(3) Whales entangled in deep sea cables Longitudinal and transversal slope of the Florida current Fourteen instances of whales entangled in submarine cables are reported. Relation between transverse slope of Six cases occurred in about 500 sea surface and mean speed of current is combined with Torricelli's theorem. fathoms, with 620 fathoms the maximum depth reported. All positively It is shown that the mean speed of the identified were sperm whales (Physctor Florida current gives both the normally accepted transversal height difference catodon).

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and longitudinal height difference.

FAO:glk

Hela, I., C.A. Carpenter, Jr. 570703 and J. Kneeland McNulty (1957) Bull.Mar.Sci.Gulf.Caribb., 7(1):47-99 Hydrography of a positive, shallow, tidal bar-built estuary (Report on the hydrography of the polluted area of Biscayne Bay)

Hydrographic surveys of the estuary with special emphasis on the flushing.

Henderson, I.F. and 570706

W.D. Henderson (1957)

Princeton, N.J., 548 p.

A dictionary of scientific terms

Pronunciation, derivation, and definition of terms in biology, botany, zoology, anatomy, cytology, genetics, embryology, physiology.

FAO:tl

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Hemphill, A.F. (1957) 570704
Copeia, (1):53
The southern redbelly dace, Chrosomus

orythrogaster erythrogaster, from the lower Mississippi river drainage

Reports collections that extend the southern range of this sub-species and states association with large numbers of Campostoma anomalum and Semotilus atromaculatus.

Hennemuth, R.C. (1957) 570707 <u>Bull.interam.trop.Tuna Comm.</u>, 2(5): 174-243

An analysis of mothods of sampling to determine the size composition of commercial landings of yellowfin tuna (Neothunnus macropterus) and skipjac (Katsuwonus pelamis)

Compares estimates obtained by different sampling methods and recommends the most efficient method for future sampling.

HR:efa

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FAO:hr

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Hendorson, G.T.D. (1957) 570705 Bull.Mar.Ecol., 4:180-202 Continuous plankton records: The distribution of young <u>Gadus poutassou</u> (Risso)

Study of range, seasonal distribution, abundance fluctuations and systematics of young stages and eggs of 1212 specimens taken March-May.

Henriksson, E. (1957) 570708

Physicl.Plant., 10(5):943-8

Studies in the physiology of the lichen Colloma. I. The production of extracellular nitrogenous substances by the algal partner under various conditions

Laboratory experiments (culture) to determine the excretion of combined nitrogen by symbiotic algae (Nostoc sp.), isolated from the lichen (Collema tenax) when the algae is growing with and without nitrate under different conditions.

FAO:sjh

FAO:tl

Hepper, B.T. (1957) 570709 J.Mar.biol.Ass.U.K., 36(1):33-40 Notes on Mytilus galleprovincialis Lamarck in Great Britain

Summarizes the chief distinguishing features of Mytilus galloprovincialis in comparison with M. edulis and discusses the synonymy of the species.

Herrera, J. and F. Muñoz (1957) 570712 Invest.pesq., 7:33-48 Considoraciones biológicas sobre la composición química do la sardina (Sardina pilchardus Walb.) de Castellón (Biological considerations on the chemical composition of the sardine of Castellon).

Composition was determined from 70 samples, each of 40 specimens, taken during three and a half years. The fish were all between 125 and 135 mm. Relation between fat content and sexual development was studied, as was the relation between hydration of the proteins and the temperature of surface waters.

HR:hr

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FAO:glk

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Herdman, H.F.P. (1957) 570710 Deep-Sea Res., 4:130-7 Recent bathymetric charts and maps of the Southern Ocean and waters around Antarctica

Some recent bathymetric charts and maps of the Southern or Antarctic Ocean are discussed and some comparisons made between the various interpretations of the relief of the ocean floor. Reference is made to the nomenclature of features on the sea bed, and also to certain aspects of the continental shelf of Antarctica.

Hersey, J.B., et al. (1957) 570713 Paper presented at the Thirty-Eighth Annual Meeting, Washington, D.C., April 29 - May 2, 1957

Seismic study of the ocean floor southeast of the Blake Plateau

FAO:glk

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Herrera, J. (1957) 570711 Invest.pesq., 6:111-22 Datos climáticos del puerto de Castellón y térmicos de las aguas costeras superfi-water and vegetation of Lake Victoria ciales en relación con la pesca en 1955 (Meteorological data from the harbour of Castellon and temperatures of superficial coastal waters in relation to fishing in 1955)

Meteorological data and surface water temperatures from fishing grounds are summarised for 1955, as' possible indicators of upwelling.

Hesse, P.R. (1957) 570714 Hydrobiologia, 11(1):29-39 The distribution of sulphur in the muds,

Describes methods used and analytical results obtained from investigations in northern area of the lake, including island soils.

FAO:glk

FAO: wad

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Heuschmann, 0. (1957) 570715 Handb.Binnenfisch.Mitteleurop., 3(8):

Die Hechtartigen Ordnung Haplomi (Esociformes) (The pikes and related species order Haplomi (Esociformes))

Biology, ecology and distribution of pike and related species.

Hida, T.S. (1957) 570718 Spec.sci.Rep.U.S.Fish Wildl.Serv., (215):13 p.

Chaetograths and pteropods as biological indicators in the North Pacific

Displacement volume and 'group count' data are analyzed to show general abundance and distribution, indicating the existence of faunal zones; relations with albacore distribution and temperature—salinity features were studied.

FAO:tl

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GLK:glk

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Heuschmann, O. (1957) 570716 Handb.Binnenfisch.Mitteleurop., 3(8): 23-199

Die Weissfische (Cyprinidae) (Whitefishes (Cyprinidae))

Biology, ecology and distribution of whitefishes.

Hidaka, K. (1957)

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Geophys. Notes, Tokyo, 10(1)
Geostrophic currents and mixing

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Hewatt, W.G. and 570717
J.D. Andrews (1957)

Proc.Nat.Shellf.Ass., 46(1955):129-33

Temperature control experiments on the fungus disease, Dermocystidium marinum, of oysters

Temperatures of 15° C arrested infection and mortality of the oysters caused by the disease.

Hidaka, K. (1957) 570720

Geophys.Notes, Tokyo, 10(1)

Influence of friction on geostrophic flow; sources of errors in dynamic computation of ocean currents

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Higasa, S. and A. Suzuki (1957) 570721 Rep. Nankai reg. Fish. Res. Lab.; 6:1-7 (Biochemical studies on the growth and maturation of fish bodies. I. On the variation of ether-soluble matters of ovaries and livers with gonad development in yellowfin tuna (Part I)). Ni Account of investigations on quantitative changes of fatty constituents in ovaries and livers of Neothunnus

macropterus in different stages of sexual maturity.

FAO:efa

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hurricanes.

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Reports results of 570721.

Hill, M.N. (1957)

Hilder, B. (1957)

Mar. Obs., 27:215-8

10th-14th December, 1956

International Symposium on Tropical

Cyclones - Held at Brisbane, Queensland,

Popular review of the present practices

and future possibilities and unsolved problems for predicting the tracks of

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Nature, Lond., 180:10-3 Geophysical investigations on the floor of the Atlantic Ocean in DISCOVERY II,

Review of the seismic refraction, magnetic, bathymetric and photographic work done on the cruises during 1956.

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Highton, R. (1957) Copeia, (2):107-9

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Correlating costal grooves with trunk vertebrae in salamanders

Gives the results of estimation of the number of trunk vertebrae by counting costal grooves in Plethodon and other salamanders.

Hincks, W.D. (1957) Résult.sci.Explor.hydrobiol.Tanganyka,

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3(6):39-42 Dermaptera

A taxonomic list.

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FiB:hr

Hindle, E. (1957)
Nature, Lond., 180:935-6
Zoological literature

Review of 571556.

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Hiyama, Y., T. Kusaka and 570730 K. Kondo (1957)
Bull.Jap.Soc.sci.Fish., 22:598-601
(Differences on the frequency of transfer of fishes among several kinds of colours for under-water fencing net). Ni En

Tin plates enamelled different colours used to simulate a fencing net in experimental tank, to demonstrate reaction of Acheilognathus lanceolate (Yari-tanago) to significant coloured objects.

GLK

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SJH:sjh

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Hipkins, F.W. (1957) 570728 Fish.Leafl., Wash., 439:12 p. The dungeness crab industry

Deals with Cancer magister, often called the Pacific crab. Includes brief history of the commercial fishing areas, methods of capture, fishing boats, and regulations for the commercial fishery. Statistics on landings of dungeness crabs in California, Oregon, Washington and Alaska from 1946 to 1954.

Hobbs, H.H. Jr., and 570731
M. Walton (1957)
Tulane Stud.Zool., 5:39-52
Three new crayfishes from Alabama and
Mississippi

Three new crayfishes of the Blandingii Group are described from Alabama and Mississippi: Procambarus hybus, P. mancus and P. jaculus.

FAO:glk

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Hiyama, Y., T. Kusaka and 570729
K. Kondo (1957)
Bull.Jap.Soc.sci.Fish., 22:602-4
(Difference on the frequency of transfer of fishes with different degrees of inclinations of underwater fencing net).

Ni En

White enamelled tin plate used in tank to simulate fencing net set at varying angles to the vertical and demonstrate reactions of Acheilognathus lanceolate (Yari-tanago) to significant inclined objects.

Hodgson, W.C. (1957) 570732 Routledge and Kegan Paul, London, 197 p. The herring and its fishery

Covers the following topics: I. Distribution of the family Clupea; II. The herring fisheries; III. Catching the herring; IV. The herring as a food; V. Science and fishing; VI. Fluctuations; VII. Science and the fish; VIII. The East Anglian fishery and forecasting; IX. The decline of the East Anglian fishery.

SJH: sjh

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Hoffman, J. (1957) 570733 Holden, A.V. (1957) 570736 Int.hydr.Rev., 34(2):47-57 Challenger Soc., 3(9):29 Factors concerned in the removal of Application des courbes hyperboliques au sondage par écho (Application of phosphate from fresh waters hyperbolic curves in echo-sounding) Abstr. of paper read at Joint Meeting Discussion of the use of these curves of the Brown Trout Research Laboratory, in determining the breadth of the Pitlochry. 4th and 5th October, 1956. emission beam of the echo-sounder, the Account of investigations on speed of the vessel, the phase of the disappearance of dissolved phosphate, recorder, the slope of the bottom, in following addition of fertilizer to a Scottish hill loch, and some factors interpreting bottom configuration and perhaps in solving the problem of the concerned in phosphate removal. Incl. deep scattering layer. discussions on possibility of producing permanent increase in quantity of phosphorus in circulation. \mathbb{F} FAO:glk M SJH: efa. Holland, G.A. (1957) (1957)Hohn, M.H. 570734 Petrol.Engr, 29(2):46-8 Fish.Res.Pap.Wash.Dep.Fish., 2(1):43-59 The diatometer, a method for indicating Migration and growth of the dogfish conditions of aquatic life shark, Squalus acanthias (Linnaeus), of the eastern North Pacific Catch statistics, tagging methods and returns, and factors affecting these; migrations, growth. FAO:sjh Hokkaido University, Faculty Hollande, A. and M. Enjumet (1957) 570738 570735 of Fisheries (1957)Bull.sta.Aquic.Peche Castiglione, (8): Hokkaido 1957 271-9 Data record of oceanographic observations Sur une invasion des eaux du port d'Alger and exploratory fishing, no. 1 par Chattonella subsalsa (= Hornellia marina Sub.) Biecheler - Remarques sur Concerned with data collected in la toxicité de cette chloromonadine (On an invasion of the waters of the cruises to the Aleutians and Bering port of Algiers by Chattonella subsalsa Sea. (Hornellia marina Sub.) Biecheler -Remarks on the toxicity of this chloromonadine) Notes on the biology and toxicity of

this sp.

FAO:efa

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1:Suppl.123

Hollande, A. and M. Enjumet(1957) 570739
C.R.Acad.Sci., Paris, 244:508-10
Enkystement et reproduction isosporogenétique chez les Acanthaires
(Encystment and isosporogenetic reproduction in the Acantharia)

Content as per title.

Honma, M. and T. Kamimura (1957) 570742

Rep.Nankai reg.Fish.Res.Lab., 6:84-90
(Studies on the albacore. V. The
fishing condition and size of albacore
taken in the South Pacific Ocean).

Ni En

Hook-rate length compositions from Tokyo, Misaki and Yaizu landings and mother ships working near Solomon I. 1952-55.

FAO: efa

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FAO: sjh

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Holmberg, L. (1957) 570740 <u>Svensk FiskTidskr.</u>, 66(12):201-2 Fiskande kråkor (Fishing <u>Corvus</u> <u>corone cornix</u> L.)

Observations on the fishing behaviour of this bird.

Hood, D.W., K. Park and 570743 J.B. Smith (1957) Paper presented at the Thirty-Eighth Annual Meeting, Washington, D.C.,

April 29 - May 2, 1957
Bicarbonate ion as a source of carbon for marine plants, and its oceanographic significance

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Holmes, R.W., M.B. Schaefer 570741 and B.M. Shimada (1957)

Bull:interam.trop.Tuna Comm., 2(4):129-

Primary production, chlorophyll, and zooplankton volumes in the tropical Eastern Pacific Ocean. Es

Description of the methods used; results of surface and subsurface observations; correlation of surface primary production and zooplankton volumes with surface chlorophyll and comparisons with observations in other oceanic regions.

FAO: tl

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Hooker, C.V., M.H. Duffner 570744
and C.R. Brown (1957)
Washington: Government Printing Office,
235 p.
The polar bibliography. Vol. II

Annotated bibliography, prepared by staff of the Technical Information Division in the Library of Congress for the USA Department of Defense. Not available for general distribution or for sale. Accessible to readers at the Library of Congress along with Vol. I issued in 1956. Containing references to unpublished, unclassified documents relating to the polar and subpolar regions and to the effects of cold environment on men and equipment.

Hopke, F.W. (1957) 570745

Fischwirt, 4:85-91

Kapfenwirtschaft in Seen (Carp culture in the lakes)

Review of the problem and present practices.

Hoshi, T. (1957) 570748 Sci.Rep.Tohoku Univ., 4th Ser., 23(1):

Physiology and ecology of plankton.
XII. Changes in oxygen consumption of
the daphnid, Simocephalus vetulus, with
the decrease of oxygen concentration

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Horiguchi, Y. (1957) 570746

Bull.Jap.Soc.sci.Fish., 22(12):747-51

(Biochemical studies on Pteria (Pinctada)

martensi (Dunker) and Hyriopsis schlegeli

(Martens) - III. Accumulation and

disappearance of Ca⁴⁵ in various organs

of Hyriopsis schlegeli (Martens)). Ni

Study of calcium metabolism, using tracers, to clarify mechanism of shell and pearl formation.

Hoshi, T. (1957) 570749 Sci.Rep.Tohoku Univ., 4th Ser., 23(1): 35-58

Physiology and ecology of plankton. XIII. Hemoglobin and its role in the respiration of the daphnid, Simocephalus vetulus

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Horridge, G.A. (1957) 570747

Phil.Trans., Ser.B., 240(675):495-528

The co-ordination of the protective retraction of coral polyps

Hoshina, T. (1957) 570750 J.Tokyo Univ.Fish., 43(1):59-66 Further observations on the causative bacteria of the epidemic disease like furunculosis of rainbow-trout

Description of Vibrio piscum var.

japonicus n. var. from Salmo gairdnerii.

Epidemic was reported by author in

J. Tokyo Univ. Fish., 42:15-6, 1956.

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Hoshina, T. and T. Sano (1957) J.Tokyo Univ.Fish., 43(1):67-9 On a trypanosome of eel Ill. description of Trypanosome (not T. granulosum) from Angu japonica in pond, Shizuoka, standard 1956.	ma sp. illa	Hourston, A.S. (1957) Progr.Rep.Pacif.Cst Stas, (109) Relative abundance of juvenile in the strait of Georgia in 195 1956 Nos. observed schools of Clupea	herring 5 and
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Hubbs, C. and K. Strawn (1957) 570763 Huddle, H. (1957) 570766 Evolution, 11(1):1-10 Inform. Lcafl. Calif. Dep. Fish Game, Relative variability of hybrids between (18):3 p. the darters Etheostoma spectabile and Chemical eradication of aquatic weeds Percina caprodes and algae A sample of F1 hybrids between the orange Lists some of the major chemicals throat darter (Etheostoma spectabile) and used and includes detailed methods for the logperch (Percina caprodes) stocks use of copper sulfate in algae control. from the San. Gabriel River varied widely in a number of morphological characters. Hybrids of the same combination from Colorado River stocks were no more variable than their parental stocks. F GLK: wad WAD: wad F 570764 Hubert, W.E. (1957) Humes, A.G. (1957) 570767 Paper presented at the Thirty-Eighth Bull. Inst. franc. Afr. noire, A. Sci. nat., Annual Mecting, Washington, D.C., 19:485-90 April 29- May 2, 1957 Une nouvelle espèce de Clausidium Numerical sea-condition forecasts (Copepoda, Cyclopoida) parasite d'une Callianassa au Sénégal (A new species of Clausidium (Copepoda, Cyclopoida) parasite on a Callianassa in Scnegal) Morphological description. M FAO:glk M Hublou, W.F. (1957) 570765 Humes, A.G. (1957) 570768 Progr. Fish Cult., 19(1):40-3 A method of using an anesthetic in Vie et Milieu, 8(1):9-22 Doux copépodes harpacticoldes nouveaux du gonre Tisbe, parasites des holothumarking fins ries de la Méditerranée (Two new harpacticoid copepods of the genus Describes a closed recirculating system Tisbe, parasite to the holothurians of used for marking salmonids in hatchery the Mediterranean) troughs. A taxonomic description of Tisbe holothuriae and T. cucumariae, followed by a discussion of their systematic relationship.

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Humes, A.G. (1957) Vie et Milieu, 8(1):1-8 Octopicola superba n. g., n. sp. pode cyclopoide parasite d'un Oc la Méditerranée (Octopicola n. g., n. sp., a cyclopoid coper parasite to an Octopus of the Mediterranean) A taxonomic description of the g and species, followed by a discu of the systematic position of the	superba superba pod genus assion	Hurley, D.E. (1957) Trans.roy.Soc.N.Z., 84(4):903- Studies on the New Zealand amplifauna - No. 14. The genera Hya: Allorchestes (family Talitridae The genera Hyale and Allorchestes considered distinct and keys atto the New Zealand species of I which are here revised. Seven of Hyale and two of Allorchesterecorded two of the former being records for New Zealand.	hipodan le and e) tes are re given Hyalc species es are
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Huntley, I.D. (1957) Weather, 12:373-6 The Thames in winter	570771	Hylblom, R. (1957) Ark.Zool., 10:539-82 Studies on palaeonemerteans of Gullmar Fiord area (West Coast Sweden) A taxonomic description.	
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Idyll, C.P. (1957) 570775

The Marine Laboratory, University of

Miami, ML 15951, 57-11, 11 p.

Quarterly report on fisheries research

Statistics. Report of investigations on shrimp, weakfish, tarpon, snook, gamefish, and on various technological problems.

Il'in, B.S. (1957) 570778

Vop.Ikhtiol., 8:25-7

Dobavlenie k faune buchkov (Gobiidae)
Chernogo Moria (Additions to the
Goby (Gobiidae) fauna of the Black Sea)

Notes on Gobius (Macrogobius) paganellus L.

FAO:glk

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Iljin, A.V. (1957)

of the Commodore Islands)

carried out in 1950-55.

C.R. Acad. Sci. U.R.S.S., 116:397-400

Novye damye o reliefe morskogo dna v

raions Komandorskikh ostrovov (New

data on the bottom relief in the region

Description and results of ocho-soundings,

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Igarashi, H. et al. (1957) 570776 Bull.Hokkaido reg.Fish.Res.Lab., (16):

(Preliminary report on copper content in the sea water and the marine algae of the inlet of Toyohama, Ishikari Bay).

Ni En

Spectrographic analysis of copper as indicator of pollution, showed specific and seasonal variations, in <u>Sargassum</u>, <u>Enteromorpha</u>, <u>Ulva</u>, <u>Laminaria</u>, <u>Chondrus</u>, <u>Rhodymenia</u>, <u>Scytosiphon</u> and <u>Grateloupia</u> spp.

FAO:sjh

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Ikematsu, W. (1957) 570777
Bull.Jap.Soc.sci.Fish., 22(12):736-41
(Ecological studies on the clam, Tapes japonica (Reeve). II. On the setting season and the growth in early young stage). Ni

Study of collections made 1952-55 from Sea of Ariake; two seasons; May and December, but former is unstable.

Imamura, Y. and 570780
M. Ogura (1957)
Bull.Jap.Soc.sci.Fish., 23(3):150-6
Study on the effects of the fish-gathering by means of Furinawa

Use of model fishing gear in tank with Cyprinus carpio to study the characteristics of the oquipment used in the Japan Inland Sea to catch Pagrosomus major.

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Imhoff, K., W.J. Müller Indo-Pacific Fisheries . 570784 and D.K.B. Thistelthwayte (1957) (1957) Butterworths Scientific Publications, Regional Office for Asia and the Far East, FAO, Bangkok, 1 vol. Disposal of sewage and other water-Directory of fisheries institutions borne wastes (Asia and the Far East) MF MF Inaba, D. et al. (1957) 570782 Ingalls, T.H. (1957) 570785 J. Tokyo Univ. Fish., 43(1):81-96 Sci. Amer., 197(4):109-16 Preliminary report on the spawning of Congenital deformities grass-carp and silver-carp in the Tone River, Japan and the development of Illustrated report on experiments to their eggs measure the damage to the embryo of zebra fish by lack of oxygen. Ill. description of successful experiments in propagation of Ctenopharyngodon idellus, Hypophthalmichthys molitrix and Aristichthys nobilis. FAO: sjh \mathbf{F} FAO:hr F Indo-Pacific Fisheries 570783 570786 Inger, R.F. (1957) Fieldiana, Zool., 36(3):341-405 Council (1957)Occ. Pap. IPFC, 57/3, 33 p. Report on a collection of marine fishes National fisheries policy and programme from North Borneo Compilation of statements on governmental programmes in administration, development and research, and policy on which these programmes are based.

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570787 Ingols, R.S. (1957) Sewage industr. Wastes, 29:292-7 Pollutional effects of hydraulic power generation

570790 International Commission for the Northwest Atlantic Fisheries (1957) Halifax, N.S., Canada, 76 p. Annual proceedings for the year 1956-57, Vol. 7

Administration report and financial statement for 1/7/56 - 30/6/57; report of 7th Ann. Meeting, in Lisbon, 20-25/5/ 57, with agenda and list of participants; summaries of research by member countries in each subarea, for 1956; list of laboratories and scientists.

International Commission for the 570791

Northwest Atlantic Fisheries (1957)

Announcement of German ratification of the ICNAF treaty. A brief discussion of German participation in fishing and

research in the area. Report on the

International Commission for the

Statistical Bulletin, Vol. 5 for the

the Convention Area 1952-55; Part 2 gives detailed tables of landings by species groups, certain species, country,

month, subdivision, subarea and gear, and landing effort by gear and subarea

Part 1 gives summary of the fishery in

Halifax, N.S., Canada, 52 p.

Northwest Atlantic Fisheries (1957)

enforcement of legislations proposed

by the Commission and news of various

fishing operations by member States in

Halifax, N.S., Canada, 4 p.

Newsletter No. 25

the Commission area.

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Ingram, W.M. (1957) 570788 Public Health Service, U.S. Dep. Health Education and Welfare, 95 p.

Handbook of selected biological references on water pollution control, sewage treatment, water treatment

Selected largely for availability and usefulness to those not trained primarily in biology. Also includes references on organism identification. Not annotated.

FiB:glk

year 1955

for each country.

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Inter-Island Marine Biological 570789 Conference (1957)

Univ.Puerto Rico, Off.nav.Res. (March 31 - Apr. 6, 1957), 28 p. Report by the Institute of Marine Biology, College of Agriculture and Mechanic Arts, University of Puerto Rico, Mayaguez, Puerto Rico

Contains the objectives, general program, and program of meetings and abstracts of proceedings. Appendices A and B contain the abstracts of some papers presented and an account of laboratories of the region respectively.

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GLK:hr

1:Suppl.132

International Electrotechnical 570793
Commission (1957)
Publ.int.electrotech.Comm., (92), 175 p.
Recommendations for electrical
installations in ships

International North Pacific 570796
Fisheries Commission (1957)
Vancouver, 88 p.

Annual report for the year 1956

Report of the 1956 annual meeting, administrative report and the results of research by Canada, Japan and U.S.A. in 1956.

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International Institute of 570794
Refrigeration (1957)
Paris, 240 p.

Commissions: 2, Nantes. 1. Airconditioning on board ships. 2. Thermal
insulation on board ships. 3. Thermal
measurements.

Irisawa, H. and
A.F. Irisawa (1957)

Biol.Bull.Wood's Hole, 112(3):358-62

The electrocardiogram of a stomatopod

The electrocardiogram of the tubular heart of the mantis shrimp, Squilla oratoria de Hann, was studied.

Structural findings are described which confirm Alexandrowicz's observation.

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International Labour Conference (19

ce (1957)

Seventh item on the agenda, Geneva, International Labour Office, Report 7(1)

Conditions of work of fishermen.

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Irving, L and J.S. Hart (1957) 570798 Can.J.Zool., 35:497-511
The metabolism and insulation of seals as bare-skinned mammals in cold water

The metabolic rate of five harbor seals (Phoca vitulina) and two harp seals (Phoca groenlandica) was measured over a temperature range of 25° to 10°C. in air and 20° to 0°C. in water. Surface temperatures and tissue temperature gradients were also determined. Metabolic economy of the seals in ice water was preserved by exceptional cooling of all body surfaces (to about 1°C.), which cooling provided protection comparable to that of fur of large land mammals in coldest climates.

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Isaacs, J.D., R.P. Huffer 570799
and L.W. Kidd (1957)
Science, 125(3243):341
Instrument stations in the deep sea

Preliminary announcement of technique for mooring instrument stations in depths of from 3,200 to 4,700 metres.

Itazawa, Y. (1957) 570802
Bull.Jap.Soc.sci.Fish., 22:685-93
(The diurnal variation of the oxygen content of the fish-culture-pond water).

Ni En

Results (by carbon dioxide method of O2 estimation) are related to phyto-plankton density (estimated by Nakamura white disk transparency method), to size of fish population, and to amount of other radiation.

FAO: glk

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SJH:sjh

Itazawa, Y. (1957)

Describes techniques.

Bull.Jap.Soc.sci.Fish., 23:71-80
Gas content of the blood in response

to that of medium water in fish

and one suffering from dyspnoea.

Tank expts. with Cyprinus carpio in which 02 and CO2 content of arterial

and venous blood and of the water were measured and compared, for normal fish,

F

Ishida, T. (1957) 570800 Bull. Hokhaido reg. Fish. Res. Lab., (16): 63-9

(On the population of Alaska pollack in the South-West coast of Hokkaido, with special reference to the otolith study).

Ni En

Otoliths show different rates of growth in 3 groups of Therogra chalcogramma which are distinguishable by size frequency differences. Relation of these differences to population density and to oceanographic conditions.

M

SJH:sjh

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Ishigaki, T. and Y. Kaga (1957) 570801 Bull. Hokkaido reg. Fish. Res. Lab., (16): 13-38

Fishery biological studies of sand-lance (Ammodytes personatus Girard) in waters around Hokkaido - I. Especially on the structure of population

Meristic and morphometric characteristics of catch samples; fishing season and localities; clines, races, sexual differences examined.

Ito, T. (1957) 570804 Hydrobiologia, 11(1):1-28 Groundwater copepods from south-western Japan

Notes on the occurrence, taxonomy and morphology of 15 cyclopoids from wells and limestone caves. Three new species are described: Paracyclops aioiensis, Acanthocyclops miurai and Halicyclops higoensis.

FAC.sjl.

FAO: sjh

1.

FAO: wad

570805 Iurovitskii, Iu.G. (1957) Zool.Zh., 36(6):831-8 K voprosu ob izmenchivosti organizmov (On the variability of organisms)

Discussion of the variability and character of organisms, regarding variability itself as an adaptive character like all other features of the organization, activity and behaviour of species. The discussion is based on data relating to fecundity of Abramis ballerus L.

FAO:glk

FAO:glk

Iwai, T. (1957)

Iversen, E.S. and

the Line Islands

H.O. Yoshida (1957)

Notes on the biology of the wahoo in

Methods; notes on availability,

reproduction, food habits, length

length-weight relation, and parasites.

Bull. Jap. Soc. sci. Fish., 23(6):295-301

The sequence of yolk absorption in the

embryo of the deep-se luminous shark,

Etmopterus lucifer Jordan et Snyder

Ill. report of histological study of series of 88 specimens ranging 3.7 - 15 cm

females caught off Owashi in spring and

total length stripped from gravid

autumn fishing seasons, 1954.

frequency, composition of catch,

Pacif.Sci., 11(4):370-8

M

570809

570808

570806 Ivanoff, A. (1957) Bull.Com.centr.Océanogr., 9(9):491-9 Un polarimètre sous-marin à cellule photoéléctrique. Premiers résultats obtenus (A sub-marine polarimeter with photoelectric cell. First results)

Description of the polarimeter and of the principles on which it operates, with an account of the first results obtained concerning the influence of depth and of wave length and a discussion of other possibilities of the polarimeter.

FAO glk

SJH:sjh

Ivasik, V.M. and P.E. Roi (1957) 570807 | Izhevskii, G.K. (1957) Bul.Inst.Cerc.piscic.Roman., 16(2):61-8 Experiente pentru lichidarea hidropiziei crapilor in gospodariile de elestee din regiunile vestice ale RSS Ucrainene (Experience in control of carp dropsy in fish farms of western regions of Ukraine). Fr

Reports results of experiments for improvement of Cyprinus carpio culture.

570810 Fish.Ind., Moscow, (12):48-55 O zablagovremennom opredelenii rezhima Barentsova moria (The timely forecast of the water regime in the Barents Sea)

The sea's thermal regime and fish behaviour. Larger range of migrations and lesser concentration of shoals in warm years which are also more propitious for reproduction. Warm spells in the Barents Sea correspond to cold ones off Greenland. Importance for fisheries of forecasts based on studies of currents.

FAO:sjh

FiB:go

Jaag, 0. (1957) 570811 Monatsbull.schweiz.Ver.Gas- u.Wasserfachm., 37:225-8

Radioactivity and protection of water

Jakovlev, V. (1957) 570814 <u>Kurze Mitt.Inst.FischBiol.Univ.Hamburg</u>, (7):23-8

Vorläufige mitteilung über die Untersuchung des wassergehaltes bei schollen und klieschen (Preliminary communication on research into the water content of plaice and dab)

Report of determinations made on fresh material at sea and examination of the relation of percentage water content with length.

(1957)

especially Graham, M.), 1956.

Man's role in changing the face of the

Critical review of Thomas, W.L. (see

MF

FAO:glk

earth

James, P.E.

Econ. Geogr., 33:267-74

M

570815

Jablonski, O. (1957) 570812

Prace Inst.morsk.Gdánsk., (8):5-37

Metoda ogólnego projektowania
exspedycyjnych flot rybackich (A
method of joint designing of a fishing
flotilla). En Ru

Desirable relations of characteristics of fishing grounds of groups within the fleet and technical characteristics of craft. Handling efficiency. A system of equations is devised to give alternative and economically optimal design solutions; selection of technically practicable solutions. Working schemes for the fleet. Bibliography of this neglected but important subject.

M

FAO: s.jh

F

Jacquemart, S. (1957) 570813
Résult.sci.Explor.hydrobiol.Kivu,
Eduard and Albert, 3(2):65-129
Trichoptera des lacs Kivu et Eduard
(Tricoptera of lakes Kivu and Edward)

Japanese National Commission 570816 for UNESCO (1957)
Tokyo, 235 p.

Oceanographic papers in Japan (Annotated Bibliography 1873-1938)

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FAO: tl

Jennings, J.B. (1957) Jashnov, W.A. (1957) 570817 Biol.Bull., Wood's Hole, 112(1):63-80 Zool.Zh., 36(2):191-8 Studies on feeding, digestion, and food Comparative morphology of the species storage in free-living flatworms of Calanus finmarchicus S.L. (Platyhelminthes: Turbellaria) Discusses the structure of the head and A study has been made of the food, the legs of the 5th pair of adults and feeding mechanisms, digestion and food stage V of C. finmarchicus (Gunner), C. glacialis Jaschnov, C. helgolandicus (Claus) with variety C.h. ponticus storage in the triclad Polycelis cornuta, supplemented by obsevations on representatives of the other three Jaschnov and C. pacificus Brodsky. flatworm orders. FAO: glk FAO: tl 570821 Jayaraman, R. and 570818 Jensen, A.J.C. (1957) Dansk FiskTid, 75(1):1-3 S.S. Gogate (1957) Proc. Indian Acad. Sci., Sec. B, 45:151-64 Aendret mackeviddes virkning på Salinity and temperature variations in fiskariudbyttet (The influence of the surface waters of the Arabian Sea the changed mesh-size on the yield of off the Bombay and Saurashtra coasts the fishery) Summary of the discussions and investigations on the subject in connection with the North Sea Convention. FAO:tl M 570819 570822 Jenkin, P.M. (1957) Jensen, E.C. et al. (1957) Phil. Trans., Ser. B, 240:401-93 Sewage industr. Wastes, 29:687-94 The filter-feeding and food of Radioactive waste problems facing flamingoes (Phoenicopteri) State governments

MF

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Jensen, P.T. (1957) 570823 Calif. Fish Game, 43(1):99 An extension of the range of the longfinned smelt

Discovery of Spirinchus dilatus in Eel River, California, USA, in 1955, extends known southern range by 400 miles and adds another species to fish fauna of California.

John, K.R. (1957) 570826 Copeia, (2):123-32 Observations on the behavior of blind and blinded fishes

Gives the results of an analysis of the various components of orientation including memory and distance perception mainly obtained on Anoptichthys hubbsi and Astyanax mexicanus.

HR: wad

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HR: hr

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Jeppson, P. (1957) 570824 Progr.Fish Cult., 19:168-71 The control of squawfish by use of dynamite, spot treatment, and reduction of lake levels

Describes methods used in Idaho (USA) lakes for the dispersal or eradication of spawning schools with ditching dynamite, killing of young with rotenone and Fish Tox, and exposure of eggs. Notes on the life history of Ptychocheilus orogonensis are given.

John Murray Expedition 570827 (1957)1933-34 Sci.Rep.Murray Exped., 10(3):8 p. Cephalochordata

WAD: wad

570825

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Jerlov, N.G. (1957) Tellus, 9(2):229-33 A transparency meter for Ocean water

The significance of the optical system in extinction measurements for a liquid dispersion is emphasized. In particular, the mechanism by which light is lost by scattering in a transparencymeter in the sea is discussed. The strongly selective absorption of yellow substance is demonstrated. A new transparency-meter sufficiently accurate for measurements in clear ocean water is described.

Johnels, A.G. (1957) 570828 Oikos, 8(2):122-9 The mode of terrestrial locomotion in Clarias

Description, with series of stills from ciné-film and line drawings of movement on dry-land of Indian catfish, probably C. senegalencis, but perhaps C. lazera, observed in 1950.

FAO: tl

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FAO: sjh

Johnson, F., J.R. Arnold and Jolivet, Y. (1957) R.F. Flint Résult.sci.Explor.hydrobiol.Tanganyka, Science, 125(3241):240-2 3(6):37-8 Radiocarbon dating Dictyoptera Blattodea Part of the article deals with the age A taxonomic list. of bottom waters of the oceans and the mixing and movement of water masses, as related to the general problems of radiocarbon dating. M F FAO: tl FiB:hr Johnson, L.D. (1957) 570830 Jolly, V.H. (1957) Progr.Fish Cult., 19(1):31 Trans.roy.Soc.N.Z., 84(4):855-65 Neutralizing clectrostatic charge on . A review of the copepod genus Boeckella rolling-mill scale press in New Zealand Describes method of dissipating charge The systematic position of the genus by brushes with strips of radioactive Metaboockella is discussed. Revised polonium. specific descriptions are given, and figures of the important specific characteristics. F FAO:glk FAO: efa MF Jones, D.N. (1957) Jolivet, P. (1957) 570831 570834 Résult.sci. Explor. hydrobiol. Tan anyka, Chem. Tr. J., 140:1410, 1412 3(6):43-51 Fresh water from salt water Coleoptera Chrysomeloidea A taxonomic list. FiBshr

Jones, N.R. and 570835
J. Murray (1957)
Biochem.J., 66:5-6
Nucleotides in the skeletal muscle of codling (Gadus callarias)

Determination of nucleotides in muscle of codling killed by immersion in liquid air; values were obtained for rested fish, exhausted fish, and for exhausted fish that had been caught by trawling and stored.

Jonsgard, A. and P. Høidal(1957) 570838

Norsk Hvalfangsttid., 46:507-12

Strandings of Sowerby's whale (Mesoplodon bidens) on the west coast of

Norway

Description of voluntary stranding of the whales; discussion on the distribution and biology of the genus <u>Mosoplodon</u> with growth curve.

FAO:glk

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FAO:tl

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Jones, N.S. (1957) 570836 Bull.Inst.franc.Afr.noire, A.Sci.nat., 19:482-4

Cumacea from the coast of Sénégal collected by J. Cadenat

Preliminary note listing the material collected.

Jonsgard A., J.T. Ruud 570839 and P. Øynes (1957) Norsk Hvalfangsttid., 46:160-77 Is it desirable and justified to extend the open season for humpback whaling in the Antarctic?

A study of the dynamics of the population of the humpback whales (Mogaptera nodosa) and the increase in abundance of the species as a result of closed seasons.

FAO:glk

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FAO: tl

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Jones, R.F. (1957) 570837 Biol.Bull., Wood's Hole, 112(1):81-91 Variation of nitrogen and carbohydrate constituents during the development of Himanthalia elongata (L.) S.F. Gray

Study to determine the variation of chemical constituents during growth and development from germination to maturity and senescence, with independent study of vegetative and reproductive tissues.

Jordan, H.D. (1957) 570840 Emp.J.exp.Agric., 25:197-206 Crabs as posts of rice on tidal swamps

Reports damage to seedlings by
Sesarma huzardi, S. alberti, S. angolense and Sarmatium curvatum, at
West African Rice Research Station.
Breeding season and behaviour;
methods of chemical control.

FAO: 5115

MF

FAO: sjh

Jubb, R.A. (1957)

<u>Rature</u>, Lond., 180:47-8

<u>Bols in southern Africa</u>

570841

Occurrence of several spp. of <u>Anguilla</u> in river flowing into the western Indian Ocean.

Kändler, R. and M. Lühmann (1957) 570844

Ber. dtsch.Komm. Meeresforsch., 14(3):
233-54

Über den Lachsbestand und die Erträge des deutschen Lachsfanges in der südöstlichen Ostsee (On salmon stock and yields of the German salmon catch in the south-eastern Baltic)

Notes on the history of <u>Salmon</u> salar and <u>Salmo</u> trutta; age and size of the salmon caught in southern Baltic by German fishermen and yield of German salmon fishery.

CLK:sjh

MF

FAO: tl

M

Junge, Chr. E. and 570842
P.E. Gustafson (1957)
Tellus, 9(2):164-73
On the distribution of sea salt over the United States and its removal by precipitation

Average maps for summer and winter of the distribution of chloride concentration in rain water over the United States are presented, and an attempt is made to explain them quantitatively.

F

Kajosaari, E. (1957) 570845 FiskTidskr.Finl., 64(2):52-4 Eräiden lohikalojen suhtautuminen selluloosateollisuuden jätevesiin (Behaviour of some salmonides in the waste waters from pulp and paper mills)

Extract and Finnish translation of original article: "Avoidance reactions of salmonide fishes to pulp mill effluents" (1956), Sewage industr.

Wastes, 28(11), by Jones, Warren, Bond and Doudoroff.

PAO: tl

FAO: tl

F

Kaartotie, T. and 570843
E. Ryhänen (1957)
FiskTidskr.Finl., 64(4):126-7
Fysikaalisia ja kemiallisia määrityksiä.
Kalavositutkimus, I. (Investigation of fishery waters, I.)

Physical and chemical determination.

Kajosaari, E. (1957) 570846 <u>FiskTidskr.Finl.</u>, 64(3):87-90 Eräiden lohikalojen suhtautuminen selluloosateollisuudon jätevesiin (Behaviour of some salmonides in the waste waters from pulp and paper mills)

Continuation of 570845.

FAO:t1

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FAO

Kajosaari, H. (1957): 570847 FiskTidskr.Finl., 64(2):47-8 Naikun ja siian ristoytys (Hybrid between Coregonus albula and Coregonus lavaretus)

Notes on successful experiments on hybridization made at Porla fish cultural station. Kallman, K.D., and M. Gordon (1957) 570850 Ann.N.Y.Acad.Sci., 71(3):318 p. Transplantation of fins in xiphophorin fishes

FAO:tl

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Kakimoto, D. (1957) 570848
Bull.Jap.Soc.sci.Fish., 22:634-6
(Studies on B-vitamins of pyloric coeca of skipjack, Katsuwonus vagans. IV. On vitamin B12). Ni En

Determination by <u>Fuglena</u> and by <u>Lactobacillus leichmanannii</u> methods; effect on results of extraction by hot water or by enzymatic digestion.

SJH: sjh

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I dimote, D., A. Kanazawa 570849 and K. Kashiwada (1957)

Boll. Job. Soc. sci. Fish., 22:631-3

(Amino acid composition of the pyloric cocca of skipjack, Katsuwonus vagans).

Hi En

Reports results of microbiological unalysis; response of lactic acid bacteria studied experimentally.

Kaltofen, H. (1957) 570851

Naturwissenschaften, 5:119-20

Zur Theorie der Nährstoffwirkung
(On the theory of the effect of nutrient material)

Proposes a general growth equation, applicable to the dry weight of a plant in which the rate of growth is a function of the concentration of nutrient material within the plant. The latter, having been absorbed through the roots, is expressible as a time integral, whose integrand is proportional to the surface area of the roots. The result is an integro-differential equation of considerable generality, from which further deductions can be made only if the functions involved are specified.

sjh

Kamasastri, P.V. (1957) 570852 Curr.Sci., 26:214-5 The tetrazolium bromide reduction test in assessing the quality of fish

Content as per title.

SJH:sjh

M

FAO:efa

Kamimura, T. (1957) 570853

hep.Nankai rog.Fish.Res.Lab., 5:97-118
(Studies on variability of hooked-rates of yellowfin by longline fishing, 1. A trial to estimate confidence limits of mean hooked-rates using data of the catches of commercial vessels).

Ni

Tabulation and analysis of catch records of mother ship fleet working adjacent to Solomon Islands in June-August, 1953. Transformation of data employed in analysis of variance for geographical strata and between cruises.

FAO:sjh

M

Luminescence at the depth of the sonicscattering layer in the San Diego Trough recorded at various times of day and night with a tele-recording bathyphotometer. The colour of the luminescence from the sonic-scattering layer was determined by using interference filters with the photometer. Laboratory

Kampa, E.M. and B.P. Boden (1957) 570856

Light generation in sonic-scattering.

Decp-Sca Res., 4:73-92

determinations were made of the intensity and spectral distribution of the luminescence of 2 species, Euphausia pacifica and Pyrosoma atlantica, present

and the biologist by the introduction of bioluminescence records are discussed.

570856 (Card 2)

in the water on the night when scattering-layer luminescence was measured. Problems presented to the occanographer

Kamiura, F. (1957) 570854
Rop.Nankai reg.Fish.Res.Lab., 5:84-96
(Seasonal variation and distribution of fish school amounts). Ni En

Purse-seine catches compared with scouting results and anchovy egg counts in Nankai region.

FAO:sjh

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FAC:glk

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Kammerer, J.C. (1957) 570855 Washington, 33 p. Records available to September 30, 1956, on use of water in the Delaware Basin Project area Kamshilov, M.M. (1957) 570858 Priroda, Moskva, 3:59-63 Murmanskaya biologicheskaya stantsiya (Murman biological station)

Short description and history of the station and its activities.

F

FAO: tl

Konaov, I.P. (1957) Fish.Ind., Moscow, 33(2):56-8 Perkarina kak konkurent v pita tsennykh promyslovykh ryb Azov moria (Perkarine as a comp in the nutrition of valuable i fish in the Azov Sea)	nii zskogo petitor	Kanwisher, J. and H. Leivestad (1957) Norsk. Hvalfangsttid., 46:1-5 Thermal regulation in whales An account of temperature measure made on a 54-foot fin whale (Balara physalus).	
FAO	M	FAO: tl	M
Kanwisher, J. (1957) Oceanus, 5(1-2):13-8 How cold is a whale's tail? Temperature measurements in or means of a now temperature—har		Kapoor, A.S. (1957) Experientia, 13:459-60 Sensory canals of the head in Walattu (Day) Anatomical description and compart with related species.	
FAO:hr	M	FAO:glk	MF
Kanwisher, J. and A. Ebeling (1957) Deep-Sea Res., 4(3):211-7 Composition of the swim-bladded bathypelagic fishes Measurements were made of swim size and gas composition on period in the eastern Pacific. The phyproblem of vertical migration swim-bladder is discussed.	n-bladder elagic fish ysiological	Karamchandani, S.J. (1957) Indian J.Fish., 4(1):47-61 On the occurrence of associates of fry in the fry-collection nets and destructive role played by predatish An account of the species of undefish with their percentage compose and abundance of other aquatic organisms which are concurrently in fry-collection nets operated river Ganga at Dighwara (Bihar) also an account of the depredation carp fry caused by the predators.	esirable sition found in the and on of
GLK: tl	М	GLK:glk	F

Karo, H.A. (1957) 570865

Int.hydr.Rov., 34(2):87-8

Cont cinquantenaire du "Coast and Geodetic Survey". Recueil d'articles.

I. Historique et utilisation de la photogrammetrie au "Coast and Geodetic Survey" (One hundred and fiftieth anniversary of the "Coast and Geodetic Survey". Collection of articles. I. History and use of photogrammetry by the "Coast and Geodetic Survey")

Content as per title.

Kašták, V. (1957) 570868

Biológia, 12:102-12

Holmintofauna stúk (Esox lucius)

Oravskoj priehrady (Helmintofauna in piko (E. lucius) in the artificial lake of Oravaer). Ru De

Notes on occurrence of Tetraonchus monenteron, Triaenophorus nodulosus and Raphidascaris acus in pike of a river in Slovakia, with ill. notes on their biology.

FAO: efa

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FAO:efa

F

Karpevitch, A.F. (1957) 570866 Fish.Ind., Moscow, 33(1):60-9 Rekonstruktsiia rybnogo khoziaistva Azovskogo moria (Reconstruction of fishery in the Azov Sea) Kaštak, V. (1957) Biológia, 12:137-9

570869

Nový druh monogenetickej cicavice z rodu Dactylogyrus Diesing, 1850 u
Barbus meridionalis petenyi (Heck.)
(A new species of monogenetic Dactylogirus in Barbus meridionalis petenyi (Heck.))

Notes on occurrence of <u>Dactylogirus</u>
petenyi n.sp. in B. meridionalis petenyi
of a river in Kosice district, Eastern
Slovakia.

FAO

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FAO:efa

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Kashiwada K. et al. (1957) 570867
Bull.Jap.Soc.sci.Fish., 22:637-40
(Studies on vitamin B12 in sea water.
II. On the assay method and the distribution of this vitamin B12 in the ocean). Ni En

A method of removing disturbing substances (Cl. and Mg.) by dialysis with cellophane is applied to samples taken by research vessel in N. Pacific from Lat. 0° to 30° N. on the line of Long. 130° E.

Kasturirangan, L.R. (1957) 570870 Indian J.Fish., 4(1):134-49 A study of the seasonal changes in the dissolved oxygen of the surface waters of the sea on the Malabar coast

The data on oxygen are presented along with data on temperature; salinity and rainfall are discussed in relation to the physical and biological characteristics of the Malabar coast.

SJH:sjh

M

GLK:glk

570871 570874 Kato, K. (1957) Kawai, K. (1957) Bull.Fac.Fish.Hokkaido, 7(4):291-9 Bull. Jap. Soc. sci. Fish., 22:626-30. Particulate iron in the Boring Sea (The metabolism of the pearl oyster, Pinctada martensii. III. On the tissue oxidation). Ni Respiration rates of various tissues in different seasons; blocking and stimulation of gill respiration by a scries of chemical treatments, show that a copper enzyme may play an important role. FAO M M SJH:sjh Katz, W.E. (1957)570872 Kawamoto, N.Y. (1957) 570875 Engng News Rcc., 158(7):59 Progr. Fish Cult., 19(1):26-31 Fresh from salt at \$42 per 1000 gallons Production during intensive carp culture in Japan . In this carp farm where rate of production is noted to be highest in Japan, the excretory products are stated to affect production more than 02 or CO2. MF WAD: tjj \mathbf{F} Kawada, S. and Y. Tawar (1957) 570873 Konk, R. and W.F. Clapp (1957) Bull.Jap.Soc.sci.Fish., 22:593-7 (An attempt at measuring deformation of U.S. Department of Commerce, 350 p. the setnet by a fish finder (PB131058) (Preliminary Report). Marine borers: A preliminary bibliography. Part II Reports on experiments at Kokabe in Nov. 1954, and gives illustrations and Deals mainly with the biology of marine theoretical analysis of results. borers whereas the first part, which is

Washington: Office of Technical Services,

available in migrofilm or photostat copies, was concerned primarily with the engineering aspects.

SJH:sjh

M

:glk

570880 Kimata, M. et al. (1957) (1957)Keynes, R.D. Bull. Jap. Soc. sci. Fish., 22:701-7 In "The Physiology of Fishes". Vol. II. (Studies on the marine sulfate-reducing Behaviour. Edited by M.E. Brown, bacteria. VI. Production of sulfides in Academic Press Inc., Publishers, New the estuarine region of the river York, pp.323-43 receiving a large amount of organic Electric organs drainage (1)). Ni Distribution of bacteria, and sulfides in water and bottom mud of Takano River which receives sewage and drainage from pulp factories. MF SJH: sjh MF FAO 570881 570878 Kiefer, F. (1957) Kimmins, D.E. (1957) Bull.Brit.Mus.(nat.Hist.), 6(4):91-126 Veröff.zool.Staatssamml.Münch., 4:125-50 Lectotypes of Trichoptera from the Freilebende Ruderfusskrebse (Crustacea McLachlan collection now in the British Copepoda) des Titicacasees (Crustacea! Copepoda at liberty in lake Titicaca) Museum (Natural History) F F 570882 570879 Kikawa, S. (1957) Kimmins, D.E. (1957)Bull.Brit.Mus.(nat.Hist.), 6(1):1-37 Rep. Nankai reg. Fish. Res. Lab., 5:145-57 (The concentrated spawning area of bigeye New and little known species of African tuna in the western Pacific). Ni En: Trichoptera Study of "gonad index" = weight of gonad (gm.) cube fork length (cm). Feeding groups N of subtropical convergence have | index below 1.0; index 1.1 > 3.0 is more southerly and are recruit spawners; index > 3.1 are spawners and abundant between 2° and 10°N. Some data also for yellowfin.

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FAO/59/6/4794

FAO: sjh

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Kimmins, D.E. (1957) 570883

Bull.Brit.Mus.(nat.Hist.), 6(5):127-36

New species of the genus Dicercomyzon

Demoulin (Ephemeroptera, Fam. Trichory-thidae)

Preliminary report on expedition EASTROPIC

The methods used and the results obtained, without analysis, on the EASTROPIC expedition; an oceanographic survey of the central and eastern tropical Pacific, September-December 1955. Information on east-west gradients in temperature, salinity, phosphate, zooplankton, and forage-fish abundance.

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GLK:tl

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Kimsey, J.B. (1957) 570884 Calif.Fish Game, 43(2):111-8 Largemouth bass tagging at Clear Lake, Lake County, California

Migration and survival rate of 441 fish tagged 6/53 - 3/54 of which 94 were returned in three years. Estimate of fishing and natural mortality rates.

Kinsman, B. (1957) 570887

Tellus, 9(3):408-18

Proper and improper use of statistics
in geophysics

A discussion of some of the peculiarities of the geophysical sciences together with their implications for statistical methods, particularly for the correlation coefficient. In conclusion some advice on the use of correlations is offered.

WAD:sjh

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FAO:tl

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Kimsey, J.B. (1957) 570885 Calif.Fish Game, 43(1):99-100 The status of the redeye bass in California

Clarifies the status of Micropterus coosae introduced into hatchery ponds in California in 1953; none survived after 1955.

Kinsman, S. et al. (Ed.) (1957) 570888

U.S. Dep. Health, Education & Welfare,

Publ. Health Serv., Cincinnati, Ohio,

355 p.

Radiological health handbook

Glossary, physical, chemical and mathematical data; radioisotope, decay and radioassay data; radiation protection data; table of isotopes; index and references.

TR: wad

 \mathbf{F}

TL:tl

Kitabayashi, K. (1957) 570889 Bull. Hokkaido reg. Fish. Res. Lab., (16): 100-3

(Biochemical studies on squid - XVII. On pterins). Ni En

Paper-chromatographic analysis of skin, liver, ink, muscle and shell of Ommastrephes sloani pacificus.

Kleerekoper, H. (1957) 570892
Thesis presented at the Faculty of
Science of the Paris University,

Ser.A, 3006/3878, 205 p.
Une étude limnologique de la chimie des sédiments de fond des lacs de l'Ontario méridional, Canada (Study of the limnology and sediment chemistry of the

A detailed description and comparative study with very full bibliography.

depths of lakes in southern Ontario,

FAO:sjh

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Canada)

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Kitakata, M. (1957) 570890 Bull.Hokkaido reg.Fish.Res.Lab., (16):39-48

(Fishery biological studies on sand-lance (Ammodytes personatus Girard) in waters around Hokkaido - II. On the age and growth). Ni En

Otolith studies, 4/55-5/56 of material collected on Japan sea coast show that age can be thus determined. Growth curves; regional differences; seasonal growth; Ill.

FAO:sjh

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Kleerekoper, H. and 570893
K. Sibakin (1957)
J.Fish.Res.Bd Canada, 14(2):145-51
An investigation of the electrical
"spike" potentials produced by the sea
lamprey (Petromyzon marinus) in the
water surrounding the Head Region - II.

Experiments to ascertain whether the movements of the water in and out of the branchial pores or the changes in the chemical composition of the water are directly responsible for the occurrence of the electrical potentials described earlier and to determine the locus or loci on the head from which the potentials are emitted.

GLK:glk

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Klavestad, N. (1957) 570891

Nytt Mag.Bot., 5:63-100

An ecological study of the vegetation

An ecological study of the vegetation in Hunnebunnen, an old oyster poll in south-eastern Norway

Hydrography of the area; list of flora and ecological notes on the saline meadows; benthic vegetation and its zonation; floral associations and general notes on the ecology of the area.

Klein, L. (1957) 570894

Butterworths Scientific Publications,

London, 634 p.

Aspects of river pollution

Intended primarily to assist those directly concerned with the prevention of pollution, such as river boards, local authorities, and water undertakings, but should also be of interest-to public analysts, sanitary inspectors, and health authorities. The book also includes a chapter on the effects of pollution on fish, by Jones, J.R.E., and one on the biological aspects of river pollution, by Hawkes, H.A.

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Klock, J.W. (1957) 570895 Knauss, J.A. and J.L. Reid (1957) 570898 Amer.J. trop. Med. Hyg., 5:286-9 Trans. Amer. geophys. Un., 38(3):320-5 A field technique for quantitative The effect of cacles design on the estimation of the molluscicide sodium accuracy of the GEK pentachlorophenate based on fish Simultaneous observations with a GEK and a mortality rates drifting drogue were made in order to test validity of the GEK for surface current measurements. Good agreement between the average GEK velocity and the average drogue velocity is obtained when allowance is made for windage and droop. F GLK:tl M 570896 Knauss, J.A. (1957) Knobloch, A., C. Vendrely 570899 Chron. U.G.G.I., (7):248-9 (1957)and R. Vendrely U.S. Pacific Ocean deep-water ship Biochim.biophys.Acta, 24:201-2 operation The amount of desoxyribonucleic acid in a single trout sperm Gives brief summary of the operational plans and tentative tract charts for Brief account of determination of different cruises. desoxyribonucleic acid content of Salmo irideus sperm. FAO: efa M \mathbb{F} FAO: efa Knauss, J.A. (1957) 570897 Knop, L. and 570900 Tellus, 9(2):234-7 J. Kristan (1957). An observation of an oceanic front Rep.J.Stefan Inst., 3:141-8 Beitrag zur Kenntnis der A detailed temperature section across an Wasserisotopenindisproportionierung oceanic front in the Eastern Equatorial nach einigen Wandlungsprozessen Pacific is described. normalen wassers (Contribution to the knowledge of the disproportionizing of water isotopes after some processes of changes of normal water) Description of the modified method of oxygen equilibrization by SO2. Results of measurements of isotope distribution in waters of different origin.

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FAO:glk

Knox, G.A. (1957) Trans.roy.Soc.N.Z., 85(1):141-8 Urechis novae-zealandiae (Dendy): a New Zealand echiuroid

The species is described and illustrated.

570901 . Kobayashi, K. and 570904 S. Igarashi (1957) Bull.Fac.Fish.Hokkaido, 7(1):17-20 Mathematical analysis of the filteringrate of plankton net

> Deduces an expression for the relation between filtering rate and current speed inside a conical net, which is less than that outside.

FAO:hr

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FAO: sjh

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Knudson, B.M. 570902 (1957) J.Ecol., 45:93-112 Ecology of the epiphytic diatom, Tabellaria flocculosa (Roth) Kütz. var. flocculosa in three English lakes

Population density and its rate of change measured at 10 day intervals for 4 years in the Lake District, at various levels and depths. Relation to environmental factors, principally light, nutrients, temperature, grazing, parasitism and wave action.

570905

Koch, W. (1957) Verlag Paul Parey, 300 p. (Fish breeding). (2nd ed.) Fischzucht

FAO:sjh

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570903 Kobayashi, K. (1957) Bull.Fac.Fish.Hokkaido, 7(1):21-30 (An experiment on a mid-water trawl. IV. On its mechanism and a trial practice). Ni

Mathematical and experimental study of a full-scale model having two light otter boards, a depressor and a depth indicator.

Kohn, A.J. and P. Helfrich (1957) 570906 Limnol.Oceanogr., 2:241-51 Primary organic productivity of a Hawaiian coral reef

Primary organic productivity was determined by measuring changes in oxygen concentration of sea water flowing over a fringing coral reef at Kapaa, Kauai, Hawaii. Prevalence of a rather strong, undirectional current facilitated use of this method. Determinations were made both in summer (July) and in winter (November). The authors attribute this difference to photosynthesis by benthic algae on the coral reef platform.

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HR:tl

Kojima, S. (1957) 570907 Bull.Jap.Soc.sci.Fish., 22(12):730-5 (Reactions of fish to a shade or floating substances). Ni En

Describes aquarium experiments with parrot bass, Oplegnathus fasciatus, and filefish, Monacanthus cirrhifer.

Species and size differences in feeding and other reactions.

Kolbe, R.W. (1957) 570910 Science, 126:1053-6

Fresh-water diatoms from Atlantic deepsea sediments

Reports findings of <u>Melosira granulata</u>, with notes on location of finds and origin of fresh-water diatoms.

SJH:sjh

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Norway)

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Kokhanova, N.A. (1957) 570908 ; Vop. Ikhtiol., 8:89-101 Razvitie shchipovki (Cobitis taenia L.) (The development of Cobitis taenia L.)

Description of the embryonic, larval and post-larval development and first feeding with comparison with groundling, cobitids, and carps.

Kolesnikov, V.G. (1957) 570911

Fish Ind., Moscow, (11):69-76

O vliianii gidrologicheskikh uslovii na raspredelenie i povedenie seldi v

Norvezhskom more (Influence of hydrologic conditions on the distribution and behaviour of herrings in the sea of

Data collected in 1956 by research ships. Cold and warm currents determined by wind, bottom relief and tides. Response of herring sheals to surface waves. Relation between inner, vertical waves and depth positions of sheals. Forecasts, duration of ship's drift, number of nets in the line.

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Kolbe, R.W. (1957) 570909

Rep.Swed.Deep-Sea Exped., 9(1):50 p.

Diatoms from equatorial Indian Ocean

Komaki, S. (1957) 570912 Bull.Hokkaido reg.Fish.Res.Lab., (15):84-91

(Seasonal variations in the concentrations of net-plankton pigments in sea water).

Ni En

Chlorophylls and carotenoids estimated by Richard and Thompson method, 1/54-12/55 in Hokkaždo waters.

FAO:sjh

Komarovsky, B. and O.H. Oren (1957) Fish.Bull., Haifa, (14):14-6 (Biological and oceanographical conditions in the Gulf of Eylat Iw En Water samples; figures of plank relation of these to changes in abundance.	h). ton spp.;	Konishi, J. (1957) Rep.Fac.Fish.Univ.Mie-Tsu, 2:347-52 A clue to the investigation of the control of breathing in fish by mean of electrical activity in the muscle located on the regions of the gills Measures of action potentials on sur of gill lamellae of intact Carassiu auratus (L.) on isolated gills, and the respiratory centre.	ns e rface
SJH; sjh	M	FiB:sjh F	
Komarovsky, B. and L. Schwarz (1957) Fish.Bull., Haifa, (11):8-12 (Problems of ship fouling, hist progress of fouling research in Iw En Results of raft tests in Haifa with Cu ₂ O paints.	Israel).	Konishi, J. (1957) 5 Rep.Fac.Fish.Univ.Mie-Tsu, 2:353-8 Respiratory reflex response in fish Study of respiratory response to to stimulus in unanaesthetized Carassi auratus L. by electromyogram record in gill region.	uch us
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Kominz, D.R., F. Saad and K. Laki (1957) Nature, Lond., 179:206-7 Vertebrate and invertebrate tro Reports the preparation and exa of tropomyosins from fishes and invertebrate phyla.	mination	Fish Ind., Moscow, (12):61-2 Argentina - neispolzovannaia promys) - ca
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Korobochkina, Z.S. (1957) 570919
Fish.Ind., Moscow, 33(1):71-2
Soveshchanie po biologicheskim osnovam
rybnogo khoziaistva (Meeting
regarding biological principles in
fishery)

570919 Kosal, N.H. (1957) 570922

Balık Balıkçılık, 5(1):8-13

Iki istinga halatı kullanan gırgırlar

(Improving gir-gir seines)

Translation of article from "World Fishing", May 1956, by a Russian scientist, A.N. Samarynov.

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Korringa, P. (1957) 570920

Ann.Biol., Paris, 33(3-4):109-16
On the supposed compulsory relation
between oviparous oysters and waters
of reduced salinity

Comparison of ecological requirements of oviparous oysters and those of larviparous oysters, with special reference to salinity and food availability.

Koshelev, B.V. (1957) 570923

Zool.Zh., 36(8):1217-27

Nekotorye dannye po biologii
razmnozheniia sazana v del'to Volgi
(Certain data on the biology of
reproduction of carp in the Volga
estuary)

Age composition of a carp shoal, its sites and time of spawning, relation of spawning to the level of flood and to the temperature are described.

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Korringa, P. (1957) 570921
Ann.Biol., Paris, 33(1-2):1-17
Water temperature and breeding
throughout the geographical range of
Ostrea edulis

Examination of the evidence on the temperatures at which various species and varieties of oysters spawn, with reference to the hypothesis that breeding temperature is not a physiological constant, at least for the species Ostrea edulis.

Koster, W.J. (1957)
University of New Mexico Press,
Albuquerque, 116 p.

Guide to the fishes of New Mexico. (1st .d.)

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Kotake, N. and

570925.

Kozhin, N.I. (1957) Vop. Ikhtiol., 8:8-18

poberezh'ia Kaspiia

of the Caspian)

FAO:glk

Materialy po ikhtiofaune iranskogo

Notes on distribution, catch, size, biology, etc. of the following species:

Huse huse L., Acipensor guildenstadti

Linne, Rutilus rutilus caspicus

Jakowlew), Rutilus frisii kutum

(Kamonsky), Abramis brama (Linne),

(Pallas), Chalcalburnus chalcoides (Guldentadt), Mugil auratus Risso,

persious Borodin, Acipenser stellatus

on the ichthyofauna of the Iranian shores

570928

(Materials

M. Kawamura (1957) Bull. Jap. Soc. sci. Fish., 23(6):287-9 Experimental studies on the propagation of the pearl oyster, Pinctada martenssi -: IV. Sexual difference in the external shape of the shell

Relation of shell height to length in 3-4 years old shells collected on coast of Hiwasa, Tokushima. Relative growth rates do not permit identification of sex.

SJH:sjh

Kott, P. (1957)

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570926 Kramp, P.L. (1957) 570929 'Discovery' Rep., 29:1-28 Hydromedusae from the Discovery i collections

Cyprinus carpio Linne, Vimba vimba persa

M. saliens Risso, Lucioperca lucioperca L.

The ascidians of Australia - II. Aplousobranchiata Lahille: Clavelinidae Forbes and Hanly and Polyclinidae

Aust. J. Mar. Freshw. Res., 8:64-110

Description, distribution, keys and full bibliography.

A taxonomic list. Under each species are given the most important references to the literature, list of collection stations, history, remarks on the morphology and the geographic distribution. A summary of zoogeographical results is also given.

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Kotthaus, A. and G. Krefft (1957) 570927 Ber.dtsch.Komm.Meeresforsch., 14(3):169-91 Dtsch.hydrogr.Z., 10(1):13-9
Fischfaunenliste der Fahrten mit F.F.S. Das Zirkulationstheorem von V. Bjerknes ANTON DOHRN nach Island-Grönland (The faunal list of fishes from the cruises of the ANTON DOHRN to Iceland-Greenland)

List of species with dates of capture, area depth of water, temperature of the bottom water. The number of fish caught in each locality and their length range. Notes on the species, first recorded in the area of investigation.

Krauss, W. (1957) 570930 und seine Anwendung in der Ozeanographie (V. Bjerknes' circulation theorem and its application to oceanographic research)

From V. Bjerknes' circulation theorem a new formula is derived allowing practical computations of ocean currents to be made. The range of validity of the old formula can be deduced from the new one if the order of magnitude of horizontal shearing as well as that of the divergences are known.

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Kreiss. H. (1957) 570931 : Krishna Pillai, V. (1957). 570934 Tellus, 9:53-68 Proc. Indian Acad. Sci., 45B: 101-21 Chemical studies on Indian seaweeds. Some remarks about nonlinear oscillations in tidal channels 3. Partition of sulfur and its relation to the carbohydrate content With the aid of a perturbation method the equations are integrated and it is shown that for sufficiently small ratio maximum of the flow/mean depth one can approximate the solution by two harmonics. This approximation is examined in detail. FAO: tl M M Krey, J., K. Banse and 570932 | Krishnamurthi, B. et al. (1957) E. Hagmeier (1957) Proc. Indian Acad. Sci., 45B: 165-75 Kieler Mecrosforsch., 13(1):35-40 Investigation of large-scale fish Uber die Bestimmung von Eiweiss im mortality in a temple tank in Madurai Plankton mittels der Biuretreaktion (On the determination of albumen in plankton by biuret reaction). Description of the method. TL: tl M F Krishna Pillai, V. (1957) 570933 Kruglova, V.II. (1957) 570936 Proc. Indian Acad. Sci., 45B:43-63 Vop. Ikhtiol., 8:116-28 Chemical studies on Indian seawceds. Kormovaia baza bentoiadnykh ryb Veselovskogo vodokhranilishcha i 2. Partition of nitrogen prichiny tugoroslosti sazana (Fodder basis of bonthos-feeding fish of the Veselovsky reservoir and the reasons for the slow growth of carp) History of the reservoir since 1933: discussion of the benthos and its provision of food for carp and sudak with proposals for establishment of most useful benthic fauna.

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FAO:glk

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Kryzhanovskii, S.G. (1957) 570937

Vop.Ikhtiol., 8:81-8

O partenogeneticheskom razvitii

Sakhalinskoi sel'di po materialam

nerestovogo sezona 1955 g. (On

parthenogenetic development of the

Sakhalin herring from materials of the

1955 spawning soason)

Kühl, H. and H. Mann (1957) 570540 <u>Veröff.Inst.Meeresf.</u>, 5(1):34-62 <u>Beiträge zur Hydrochemie der unteren</u> Weser (Contribution to the hydrochemistry of the lower Weser)

Data on water temperature, salinity, IH, alkalinity, carbonate content, exygen, silicon, nitrogen compounds, phosphates, iron and manganese and turbidity of the liver Weser.

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Kudinova-Pasternak, R.K. (1957) 570938 Zool.Zh., 36(6):847-51 On the penetration possibility of <u>Toredo</u> <u>nevalis</u> into the Caspian Sea

Experimental proof of this possibility and quarantine proposals that might control it.

Kufferath, H. (1957) 570941
Bull.Inst.occanogr., Monaco, (1089): 1-10
Examen microscopique d'ultraplankton
recueilli au large de Monaco
(Microscopic examination of the ultraplankton collected off Monaco)

Describes the organisms collected.

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Kudriavtseva, E.S. (1957) 570939
Zool.Zh., 36(9):1292-303
Parasitofauna ryb reki Sukhony i
Kubenskogo ozera (Parasitofauna of
the fishes inhabiting the Sukhona river
and the Kubenskoe lake)

During the spring and summer of 1951-1954, 778 examples of fishes pertaining to different species were exposed to the complete parasitological dissection. 96 species of parasites have been found, 36 of them were recorded for the first time in the European region. A number of parasites pathogenetic with respect to man and other species of fish were found.

Kufferath, J. (1957) 570942
Bull.Inst.océanogr., Monaco, (088:1-8
Tentative d'estimation gravimétrique de l'ultraplankton dans l'eau de la
Méditerranée (Tentative gravimetric appraisal of the ultraplankton in Mediterranean waters)

Describes methods and experiments to measure the quantity of bacteria and other components of the ultraplankton in sea water.

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Kunze, W. (1957) 570943 Lacombe, H. (1957) 570946 Int.hydr.Rev., 34(2):65:75 Météorologie, 371-91 Aspects généraux du sondage acoustique L'énergie des mers (Energy in seas) horizontal pour la navigation (General aspects of the application of horizontal acoustic sounding to navigation) Brief description of methods and apparatuses at present available and discussion of general aspects of their use with special reference to the merchant marine. FAO: glk M M Kuznetsov, A.P. (1957) 570944 Lacombe, H. (1957) 570947 Fish Ind., Moscow, (10):44-6 Rev. Quest.sci., 20 July 1957 Polia pitaniia domnykh promyslovykh ryb L'océanographie physique (Physical i kamchatskogo kraba v raione Severnykh ceanography) Kurilskikh ostrovov (Feeding grounds of demorsal commercial fishes and of Kamchatka crabs off the coasts of the North Kuril islands) Importance of the region illustrated by catches. Data obtained by research ships on species, amounts and distribution of benthic live feed serving cod, flatfish and crab (Paralithodos camtschatica). FAO: go M M Laclavore, G. (1957) 570945 Ladd, H.S. (Ed.) (1957) Chron. U.G.G.I., 6:211-39 Mem.geol.Soc.Amer., (67), 1077 p. International Geophysical Year - IVth Treatise on marine ecology and Antarctic Conference paleoecology; Vol.2, Paleoecology Agenda, minutes and resolutions of the Contains 24 chapters by different authors IVth Antarctic Conference. on the Paleontological Record and the Origin of Life, and Analyses from the Goologic Record; also 53 annotated bibliographies for different systematic groups, periods and areas. Index by subjects, spp., and authors.

FAO:sjh

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TL: tl

1:Suppl.158

La Fond, E.C. (1957) 570949 Indian J.Met.Geophys., 8:213-7 Sea water density at four stations on the east coast of India

Marine Biological Laboratory
LIBRARY

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WOODS HOLE, MASS.

Lafuste, et al. (1957) 570952

Rev.Trav.Inst.Pôches marit., 21:401-14

La reproduction de l'huitre portugaise
(Gryphaea angulata Lmk) dans les
centres de captage de la côte atlantique (Reproduction of the
Portuguese oyster (G. angulata Lmk)
in the catchment centres on the
Atlantic coast)

Account of collections of larvae in relation to temperature and other environmental conditions.

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FAO:glk

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La Fond, E.C. and 570950
P.V. Bhavanarayana (1957)
Indian J.Met.Geophys., 8:209-12
On a thermal feature of bottom water during upwelling on the east coast of India

Lamburn, J.B. 570953 ('Crompton, J.') (1957) Gardon City, N.Y., Doubleday, 233 p. The living sea

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La Fond, E.C. et al. (1957) 570951 Indian J.Mct.Geophys., 8:183-92 Turbidity of waters off the east coast of India

Lane, C.E. (1957)
Sea Frontiers, 3:113-9
Living power plants

Popular account of occurrence and physiology of electric fishes.

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HR: sjh

Lange, 0. (1957) 570955
Sankhya, 17:305-36
Some observations on input-output
analysis

Account of discussions on analysis of inter-industry relations for establishing quantitative relations between various branches of production.

570955 LaPointe, J.R. (1957) 570958

Nucleonics, 15(5):114-6

How radioactive wastes will be handled at PWR

FAO:efa

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Langeraar, W. (1957) 5709

Int.hydr.Rev., 34(2):31-6

Emploi du Decca comme aide aux lèves
hydrographiques de la Nouvelle Guinée
Néerlandaise (Use of Decca in
hydrographic surveys of Netherlands
New Guinea)

Narrative account of operations.

570956 | Larrañeta, M.G. and 570959
J. López (1957)
es Invest.pesq., 6:53-82
née El crecimiento de la sardina (Sardina pilchardus (Walb.)) de las costas de Castellón (The growth of sardine from Castellon coast)

Study based on scale reading. Scale to length relation were determined. The results are discussed with regard to age-composition of catch, the limiting size, differences in growth, and the period of growth and the causes thereof.

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Lapage, G. (1957) 570957

Penguin Books Ltd, Harmondsworth,

Middlesex, 1957, 320 p

Animals parasitic in man

Includes accounts of biology and control of human parasites with an aquatic intermediate host: Diphyllobothrium latum (in freshwater fish: Cyclops and Diaptomus); Opistorchis sinensis, 'Hetagonimus yokogawai, Heterophyes h. (in freshwater fish, especially Plecoglossus altivelis, and snails); Paragonimus westermanii (in freshwater decaptus and snails); Opisth.rehis sinensis (in cyprinids and snails).

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Larsen, J.A. (1957) 570960 Madison, University of Wisconsin, 160 p. Wisconsin's renewable resources; research at the University of Wisconsin into the renewable resources of field, forest, lake, and stream.

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Laseron, C.F. (1957) Aust.Zool., 12:263-82 New South Wales mussels - A tareview of the family Mytilidae Peronian zoogeographical provided a species are discussed and fone generic and five new speciare listed together with two many from the province. Original dehave been amplified, taxonomic comparisons made, and new data the distribution of the various	refrom the nce igured; fic names lew records escriptions added on	Lassarat, A. (1957) Sci.Pôche, 44:1-6 La pêche du thon en Côte d': (Tuna fishery in the Ivory) Notes on the occurrence and of Neothunnus albacora, Katpelamis and Euthynnus allite	Coast) fisheries suwonus
FAO:glk	М	FAO:hr	M
Láska, F. (1957) Biológia, 12:292-7 Příspěvek k poznání vodulí (Hy Vysokích Tater I. Druh Wandes Schechtel 1912 (Contributi knowledge of Hydrachnellae in Ru De Reports findings of Wandesia t Schechtel and incl. ill. notes biology of the sp.	ia thori on to the High Tatra)	Laughton, A.S. (1957) Deep-Sea Res., 4:120-5 A new dcop-sea underwater camera A deep-sea underwater camera several new design features Some examples of its use in and geological surveys of the are given.	a containing is described. biological
FAO:efa	F	FAO:tl	· M
Lasker, R. and R.W. Holmes (19 Nature, Lond., 180:1295-6 Variability in retention of maphytoplankton by membrane filt Three laboratory experiments the retention of Dunaliella enaphytoflagellate grown in seamedium, by using membrane filt different porosities.	arine cers to determine tchlora,	Laughton, A.S. (1957) <u>Discovery</u> , 18(2):59-62 Photography of the deep-sea Illustrated account of came: operation.	
GLK:tl	M	FAO:sjh	M

Laughton, A.S. (1957) J.R. Soc. Arts, 106:39-56 Exploring the deep ocean floor

Reviews the aim and modern techniques of deep-sea exploration and gives a brief account of the joint geophysical cruise planned by Department of Geodesy and Geophysics at Cambridge and the National Institute of Oceanography.

GLK: efa

M

Lauzier, L. (1957) Bull.Fish.Res.Bd Can., (111):269-85 Bottom temperatures on the Magdalen Shallows

The distribution of bottom temperatures on the Magdalon Shallows and their seasonal variations. The stratification of the waters in the area is considered to be a controlling factor of such variations. The characteristics of the layers, mainly their depth, thickness and temperature, vary with time and space. The bottom temperature is then a function of depth, time and location.

FAO: glk

Lauzier, L. (1957) 570969 Bull.Fish.Res.Bd Can., (111):185-92 Effects of storms on the water conditions in the Magdalen Shallows

Extreme variations in temperature and salinity have been observed at depth, during the summer months, off North Rustico, P.E.I. and Cheticamp, N.S. These were correlated with wind force and with the estimated April-June run-off direction, controlling factors of internal from the St. Lawrence watershed. adjustment of water layers according to Ekman's theory of wind-driven currents.

FAO: glk

FAO: glk

IF

570967 | Lauzier, L. (1957) 570970 Bull.Fish.Res.Bd Can., (111):287-317 Hydrographic features of the waters of the Bay of Islands, Newfoundland, in the autumn

> The seasonal temperature variations indicate a slow vernal warming and a rapid autumnal cooling. Year-to-year variations in the autumn temperature stratification occurred chiefly in the upper layers. Repeated observations during a tidal cycle at several stations in the area show variations in depth of cither the thermocline, or the isotherms, or both. The salinity stratification in the upper ten metres of the surface

> > 570970 (card 2)

layer is very variable, presumably depending to a cortain extent of the run-off from the Humber River system.

FAO:glk

Lauzier, L. (1957) 570972 Bull.Fish.Res.Bd Can., (111):193-4 The St. Lawrence spring run-off and summer salinities in the Magdalen Shallows

During the years 1945-49 the minimum salinity of the southwestern Gulf of St. Lawrence tended to vary inversely Lauzier, L. (1957) 570973

Bull.Fish.Res.Bd Can., (111):251-68

Variations of temperature and salinity in shallow waters of the southwestern Gulf of St. Lawrence

Analysis of repeated temperature and salinity observations at fixed stations in the southwestern Gulf of St. Lawrence, during the period 1945-49, show that minimum surface salinity and maximum summer temperature occur in the area from early to mid-summer depending on the location. Below the surface, the maximum temperature and minimum salinity occur at a later date than at the surface.

FAO:glk

11

Lauzier, L. and W.B. Bailey (1957) 570974 Bull.FishRes.Bd Can., (111):213-50 Features of the deeper waters of the Gulf of St. Lawrence

Several cruises in the Gulf of St.
Lawrence in 1947 and 1948 enabled the seasonal changes in the stratification of the deeper waters of the Laurentian Channel to be studied. The intermediate cold-water layer and the warmer deep layer are dealt with.

FAO:glk

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Lauzier, L., R.W. Trites 570975 and H.B. Hachey (1957) Bull.Fish.Ros.Bd Can., (111):195-212 Some features of the surface layer of the Gulf of St. Lawrence

Temperature observations in the Gulf of St. Lawrence from 1914 to 1948 inclusive are analysed. Average conditions such as thickness and temperature distribution, from May to November, are described. Temperature and salinity distribution at the surface and at 50 metres during three seasonal cruises are also discussed.

FAO:glk

II

Law, P. and J. Bécjervaise(1957) 570976

Mclbeurne, Oxford University Press, 150 p.

ANARE Australia's Antarctic outposts

Account of recent survey expeditions describing the operations, icebergs, various areas of the territory and some of the fauna.

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Lawford, A.L. and 570977
V.F.C. Voley (1957)

Trans.Amer.geophys.Un., 38(4):585-6
Discussion of "Evidence for a critical wind velocity for air-sea boundary processes" and "Change in the relationship between wind and surface water movement at higher wind speeds"

Discussion of the original articles by Mandelbaum, H. (1956), Trans.Amer. geophys.Un., 37(6):685-90, and by Lawford, A.L. et al. (1956), Trans.Amer. geophys.Un., 37(6):691-3. The results obtained with different methods for the relationship between wind velocity and movement of the surface water.

GLK:tl

TVT

570978

Laws, R.M. (1957)

Nature, Lond., 179:1011-2

Polarity of whalo ovarios

The corpora albicantia of the ovaries of fin whales (Balaenoptera physalus) and blue whales (B. musculus) are grouped towards the anterior pole of the ovary. The asymmetry is more accentuated in fin whales than in blue whales implying that ovulation generally takes place from the anterior part of the ovary which lies in close relation to the ostium abdominale.

GLK: hr

Lawson, G.W. (1957) 570979

J.W.Afr.Sci.Ass., 3(2):166-74

Some features of the intertidal ecology of Sierra Leone

The coastline of the Sierra Leone peninsula is described and relevant information given concerning the physical conditions, tides, and currents that influence it. The general features of the intertidal zonation of some common organisms on the rocks in the estuary and on the west-facing coast of the peninsula are described.

FAO:tl

Lea, C.H. (1957) 570980

J.Sci.Fd Agric., 8(1):1-32

Deteriorative reactions involving phospholipids and lipoproteins

Describes method of acrating oxygendepleted deep layers of lakes unable to support destructive exidation of objectionable organic sediments by a ship which draws up and acrates the water.

FAO: wad.

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le Danois, E. (1957) 570981

George G. Harrap and Co. Ltd. London,

190 pp.

Fishes f the world

A comprehensive encyclopedia of the world's fishes, incl. scientific data on the various spp. and habitats. 6 chapters on some natural laws in the ocean; the northern, temperate, tropical and southern regions; and the depths of the ocean.

Legand, M. (1957) 570982 Rapp.sci.Sct.Océanogr.Inst.franç.

Océanie, (1):5 p.
ORSOM III - Résultats biologiques de l'éxpédition EQUAPAC (ORSOM III - Biological results of EQUAPAC expedition)

Report on 300 plankton collected, fish caught and the activities of birds and predatory fish.

TL:glk

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Lógaré, J.E.H. (1957) 570983 J.Fish.Res.Bl Can., 14:521-52 The qualitative and quantitative distribution of plankton in the Strait of Georgia in relation to certain occanographic factors

The distribution of physical and chemical proporties of the water is described and the extent to which these proporties may determine the presence or absence of cortain organisms in the plankton, is discussed. Composition, abundance and distribution of the plankton are reported.

GLK:glk

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Leicester, J. (1957) 570984

Brit.chem.Rhigh.g. 2:364-7

Nuclear heat for desalting brackish or salt water

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Leim, A.H. (1957) 570985 Lemercier, A. (1957) 570988 Bull.Fish.Res.Bd Can., (111):177-84 C.R. Acad. Sci., Paris, 244:1280-3 Fatness of herring in Canadian Atlantic Sur le développement in vitro des waters embryons d'un crustacé isopode asellote: Jaera marina (Fabr.) (On the Fat determinations, by ether extraction, embryonic development in vitro of an were made on 154 samples of herring from asellote isopod crustacean: Jaera the Gulf of St. Lawrence, the outer marina (Fabr.) coast of Nova Scotia and southern and western Newfoundland from 1944 to 1949. Description of culture experiments with this species at various temperatures. FAO:glk M FAO:sjh M 570986 Leim, A.H., S.N. Tibbo and L.R. Day (1957) Lénier, R. (1957) 570989 France Pêche, 2(11):18 Bull.Fish.Res.Bd Can., (111):35-83 La concentration des poissons migrateurs Explorations for herring in Canadian (The concentration of migrating fish) Atlantic waters, 1945-50 Brief discussion on the distribution of Statistical data on herring; explorations tuna and other species. with sonic sounding, purse seining, bottom trawling, mid-water trawling and gill netting. FAO:glk FAO:glk 570987 Lennon, R.E. (1957) Leitilä, N. (1957) 570990 FiskTidskr.Finl., 64(1):20-1 Progr.Fish Cult., 19:179-81 Kalan suomun kasvurenkaan muodostumisesta Observations on wild, long-jaw rainbow (The formation of year rings on the fish trout scale) Describes the occurrence and character-Notes on the time of year-ring formation istics of a mandibular anomaly in by carp. Salmo gairdneri from a stream in the southern U.S. FAO:t1 WAD: wad F

Lenoble, J. (1957) Bull.Com.centr.Océanogr., 9(10): Spectrophotomètre photoéléctrique marin (Underwater photoelect spectrophotometry) Discussion of the physical proble involved; description of the appeand report of results obtained first trials.	e sous- ric ems aratus	Levvy, G.A., A.J. Hay and C.A. Marsh (1957) Biochem.J., 65:203-8 Properties of limpet β-gluck Account of work for distinguing between Patella vulgata β-and the other hexuronidases preparation.	ishing glucuronidase
FAO: glk	M .	FAO: efa	M
Lévêque, R. (1957) Terre et la Vie, 2-3:231-40 Notes sur la faune ichthyologiqu Camargue (Notes on the ichth fauna of Camargue) Notes on the local distribution, and size of fresh, brackish and species of fish.	yological abundance	Lewin, R.A. (1957) Canad.J.Res.(Bot.), 35(3):32 Four new species of Chlamydo described. C. euryale was is sea water; C. mexicana, C. p C. ulvaënsis were isolated f C. mexicana is heterothallio philotes homothallic.	monas are olated from hilotes, and rom soil.
FAO:hr.	MF :	FAO:tl	M
Levi, C. (1957) Bull.Res.Coun.Israel, 6B(3-4):20 Spongiaires des côtes d'Israel (Spongiae of the coasts of Israe Illustrated description of 30 sp of which, Axinella minuta nov. s new.	1)	Lewis, B.L. (1957) Amer.Scient., 45(3):178A-86A Mapping scientific progress Discusses the possibility of an outline map of the state and its probable advantage.	
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Lewis, J.R. (1957) 570997 571000 Libonati, M. (1957) Oikos, 8(2):130-60 Ric.sci., 27:1848-52 An introduction to the intertidal ecology Osservazioni sulla respirazione degli spermi di riccio di mare (Observations of the rocky shores of a Hebridean Island on the respiration of sea-urchin spermatozoa) General account of the more important components of the rock shore populations The action of several intermediary of North Uist in the Outer Hebrices. compounds of the Krebs cycle and of several aliphatic alcohols upon the respiration of sea-urchin spermatozoa was investigated. These substances, whereas they increase sperm respiration, are not metabolized by the cells. L FAO:sjh FAO:sjh M Lewis, R.M. (1957) Liedes, M. (1957) 571001 Spec.sci.Rep.U.S.Fish Wildl.Serv., 204 hip. FiskTidskr.Finl., 64(5):139-41 Comparative study of populations of the Kalaveden ha-arvon arvioimisesta (Evaluation of hectare value in fishery striped bass waters) Account of study to determine value of gill raker counts as a taxonomic tool Notes on the evaluation of economic in classifying populations of Roccus productivity of water areas. saxatilis of US. FAO:efa JJF. MF FAO: tl 571002 Li, Sze-chung (1957) 570999 Lietmann, H. (1957) Fischwirt, (7):178-80 Acta zool.sinica, 9:227-32 (On a new fish, Lembeichthys furcocauda-Richtige Laichteiche sichern das lis sp. nov. (Blenniidae) from South Laichgeschäft bei Kaltlufteinbrüchen (Proper spawning pond ensures spawning China Sea). Ch during cold frosts) Describes the new species together with redescription of the related genus. Construction of spawning ponds for carp. M F FAO:hr FAO: tjj

Lillelund, K. (1957)571003 571006 Lindroth, A. (1957)Kurze Mitt.Inst.FischBiol.Univ.Hamburg, Arch. Hydrobiol. (Plankt.), 53:589-97 (1):29-39 Abiogenic gas supersaturation of river Versuche zur Verdauungsgeschwindigkeit bei water der Brut vom Hecht (Escx lucius 1,.), kleiner Maräne (Coregonus albula L.) und grosser Marane (Coregonus holsatus Thienemann) (Experiments in estimation of the digestion speed in the broad of pike (Esox lucius L.), vendace (Coregonus albula L.) and whitefish (Coregonus holsatus Thienemann)) Evrytemora affinis was fed for one hour to fry which were then transferred to an aquarium with cyclopids; the passage of the calanids and cyclopids through the alimentary tract was recorded by hourly sampling. , FAU : BIK \mathbf{F} Limbert, D.W.S. (1957)571004 Lindsey, C.C. (1957)Mar. Obs., 27(175):28-31 J.Fish.Res.Bd Can., 14:651-68

Tossible effects of water diversions on Voyage of Royal Society's advance party to the Antarctic fish distribution in British Columbia Description of the voyage with data on The known distributions of freshwater sea surface temperature. fishes in drainages of the British Columbia mainland are summarized, including those of five species not previously recorded from the province. The biological consequences of certain proposed water diversions are discussed. FAO:tl GIK:glk Lindauer, V.W. (1957) 571005 Lineikin, P.S. (1957) Trans.roy.Soc.N.Z., 85(1):61-74 C.R. Acad. Sci. U.R.S.S., 116:389-92 A descriptive review of the Phaeophyceae Ob ustanovivshikhsia vetrovykh techeniiakh of New Zealand i rasprede enii plotnosti v glukokom more (Steady wind-driven currents and Gives a system of keys for the taxonomic

and ecological classification of tho New Zealand Phaeophyceae.

distribution of density in deep seas)

Calculations, in which the turbulent diffusion in seas with varying depths is disregarded.

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C.R. Acad. Sci. U.R. S.S., 115(6):1107-10

Novye dannye o moshchnosti i usloviiakh ! zaleganiia rykhlykh otlozhenii severo-zapadnoi chasti Tikhogo okeana (New data on the thickness and bedding conditions of soft deposits in the north-western part of the Pacific)

Lisitsin, D. (1957) 571012 Merentutkimuslait.Julk., 170:1-78 Vedenkorheusarvoja 1949 ja 1950 (Water level records for the years 1949-50)

Data from 13 marcographs and 11 stations along the Finnish coast.

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Lisitzin, E. (1957) 571010 J.Cons.Int.Explor.Mer., 22(2):147-51 The tidal cycle of 18-6 years in the oceans

Regional distribution of sea-level oscillation is described, phase lag between stations is related to longitude, N. or S. hemisphere, or whether coast is to West or East.

Liston, J. (1957) 571013

J.gen.Microbiol., 16:205-16

Occurrence and distribution of bacterial types on flatfish

GLK:sjh

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Lisitzin, E. (1957) 571011 Merentutkimuslait.Julk., 175:1-12 The frequency of extreme heights of sea level along the Finnish coast

Analyses on seasonal occurrence of maximum sea levels along Finnish coasts.

Littmann, W. (1957) 571014

Commun. pure appl. Math., 10(2)

On the existence of periodic waves near critical speed

FAO: tl

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Liu, H.K. (1957) 571015

Proc.Amer.Soc.civ.Engrs, 83, HY2, (1197):
23 p.

Mechanics of sediment-ripple formation

Loeb, H.A. (1957) 571018 N.Y.Fish Game J., 4(1):109-18 Night collection of fish with electricity

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Liubimova, T.G. (1957) 571016
Fish.Ind., Moscow, (12):62-4
O raspredelenii shprota v severo-zapadnoi chasti Chernogo moria (Distribution of sprat in the N.W. areas of the Black Sea)

Tentative study of the behaviour and distribution of sprat (Sprattus sprattus phalericus) in the Black Sea. Preference of colder areas and strata, due to northern origin of this fish, should guide further studies in view of commercial fishing.

FiB:go

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Llewellyn, J. and 571017
J.E. Green (1957)
J.Mar.biol.Ass.U.K., 36(1):77-9
The occurrence at Plymouth of
Dictyocotyle coeliaca Nybelin, 1941
(Trematoda: monogenea)

In a sample of over 1000 rays the 'very rare' monogenetic trematode Dictyocotyle coellaca Nybelin 1941 (total of four previous records) was found in the coelom of 35 out of 135 specimens of Raia naevus, but absent from 478 R. clavata, 420 R. montagui and 34 R. brachyura.

HR:hr

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HR:tl

Logie, R.R. (1957) 571019 Circ.Atlant.biol.Sta, gen.Ser., (28):3 p. Recent oyster mortalities and a method for restoring the fishery

Reports account of mortalities up to date in Atlantic coast of Canada and describes method of rehabilitation.

FAO:efa

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571020

Long, E.J. (1957)
Sea Frontiers, 3:67-72
Water from the sea

Popular description of the methods of obtaining fresh water from the sea.

Long, J. (1957) Sea Frontiers, 3(3):130-41 Anglers versus spearmen	571021	Loomis, W.F. (1957) Science, 126:735-9. Sexual differentiation in Hydra	571024
Describes the activities of speamen and the controversy that has up between them and line fishers	grown	Quantitative study of the role of partial pressure of CO2 as extenstimulant of sexual differentiated discussion of known and possible instances of control of biological phenomena by pCO2.	rnal tion and
FAO: glk	M	FAO: glk	F
Longhurst, A.R. (1957) Nature, Lond., 179:542-3 Density of marine benthic commun off West Africa Some quantitative data on the storop of benthos biomass in subtractions.	anding	López, J. (1957) Invest.pesq., 6:83-109 Peces jóvenes del litoral de Cas (Young fish from the coast of Cas The monthly distribution of your of 31 species trawled off the co of Castellon (Western Mediterrar Length, number and weight are co with depth. The results are disc with regard to present restricti fishing.	astellon) ag fishes basts hean). bannected cussed
GLK:tl	M	FÁO:glk	M
Longuet-Higgins, M.S. (1957) PhilTrans., 249A:321-87 The statistical analysis of a ramoving surface	571023	Lorenz, K.Z. (1957) Pan Books Ltd., London, 221 p. King Solomon's ring - New light animal ways	571026 on
A mathematical model applicable distribution of surface waves in oceans.		New edition of 1952 publication, includes accounts of behaviour cand other aquatic organisms.	
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Louisiana Wildlife and 571027
Fisheries Commission (1957)
Louisiana Conserv., 9:16
Water hyacinth control

Progress report on the fight against the water hyacinth. Photographs showing equipment, and clogged and cleared areas.

Lowenstein, O. (1957) 571030

In "The Physiology of Fishes". Vol. II.
Behaviour. Edited by M.E. Brown,
Academic Press Inc., Publishers,
New York, pp.155-86
The sense organs. Part II. The acousticolateralis system

FAO:wad

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MF

Lovoridge, A. (1957) 571028 Bull.Mus.comp.Zool.Harv., 117(2):151-362 Check list of the reptiles and amphibians of East Africa

Lowry, C.C. (1957) 571031

Int.hydr.Rov., 34(2):9-14

Installation d'un petit service hydrographique. Histoire du service des lèves hydrographiques de la Nouvelle Zelande (Establishment of a small hydrographic service. History of the New Zealand hydrographic survey service)

Account of arrangements for assembly of staff, equipment and sea-going facilities.

MF

FAO:glk

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Lowe, R.H. (1957) 571029

Rev.Zool.Bot.afr., 55

Observations on the diagnosis and biology of Tilapia leucostica Trewavas (Pisces: Cichlidae) in East Africa

Lubianov, I.P. (1957) 571032 Zool.Zh., 36(6):820-9 Benthal fauna of the lower course of the

Benthal fauna of the lower course of the Dnepr and of Kakhovka water reservoir in the first year of its existence

Discusses the peculiarities of the quantitative development and qualitative composition of the benthal fauna in the lower course of the Dnepr based on the data of investigations carried out in 1952-55. The principal changes in the benthal fauna composition connected with the formation of Kakhovka water reservoir are briefly described.

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FAO:glk

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Lühmann, M. and H. Mann (1957) 571033; Fischwirt, (7):169-71 Zur Blumonkohlkrankheit der aale (On the "Cauliflower" disease of the eel)

Short description of the disease and its distribution in the Baltic and North Sea.

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GLK:glk

Europe)

Lund, W.A. (1957)

(216):24 p.

Roccus saxatilis

dependent variables.

Lundblad, 0. (1957)

Taxonomic description.

Ark. Zool., 10(1-3):306 p.

Spec.sci.Rep.U.S.Fish Wildl.Serv.,

distance, prepelvic distance, body

depth, and caudal-peduncle depth were the characters used. The data were analyzed by appropriate F-tests in an analysis of covariance. Standard length was used as the independent variable in all comparisons, and all other characters were employed as

Morphometric study of the striped bass,

Standard lenght, head length, predorsal

Zur Kenntnis süd- und mitteleuropäischer

Hydrachnellen (On the knowledge of

hydrachnelles from South and Middle

MF

571037

571036

Lüneburg, H. (1957) 571034 Veröff.Inst.Meeresf., 5(1):63-92 Die Oberflächenbeschaffenheit bostimmter Wattypen der Wesermündung nature of the surface of certain types of tidal flats in the Weser estuary)

Description of the methods used to investigate tidal mud flats; morphological description and the distribution of grain size, organic matter, iron, manganese and alkaline metals on the tidal flats.

GLK:tl

FAO:tl

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Lumby, J.R. (1957) 571035 World Fish., May 1957 Charting the seas to help trawlermen

Popular description of the significance and use of information on currents and the physico-chemical qualities of fishery waters.

Lunel, M. (1957) 571038 <u>Int.hydr.Rev.</u>, 34(1):21-33 Utilisation des systèmes de radio-localisation et du sondage ultra-sonore en hydrographie (Utilization of systems of radio-localization and ultra-sounding for soundings in hydrography)

Enumerates and describes the radioelectric system used in hydrography.

SJH: tl

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FAO:hr

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Lunz, G.R. (1957)571039 Contr. Bears Bluff Lab., (25):10 p.

Notes on rock shrimp Sicyonia brevirostris (Stimpson) from exploratory trawling off the South Carolina coast

Methods, taxonomy, weight and length, diurnal and seasonal availability, variations, spawning scason.

MacLeod, R.A. and E. Onofrey (1957) 571042 Canad. J. Microbiol., 3:753-9 Nutrition and metabolism of marine bacteria. VI. Quantitative requirements for halides, magnesium, calcium, and

A study of the specificity of some marine bacteria's requirement for halides, magnesium, calcium, and iron and of their quantitative requirements for these ions in the presence and absence of related ions.

FAO: sjh

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FAO: tl

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571040 Macan, T.T. (1957) Hydrobiologia, 9:1-12 Notes on Gammarus pulex in the English Lake District

Data on breeding season, fecundity, variations in numbers, distribution and predators.

Macnae, W. (1957) 571043 J. Ecol., 45:113-31

The ecology of the plants and animals in the intertidal regions of the Zwartkops estuary near Port Elizabeth, South Africa. Part I

General account under principal headings of topography and description of estuary, physical and chemical features (climate, salinity, temperature, substratum, turbidity, pollution), zonation of plants (incl. note on drifted algae).

The ecology of plants and animals in the intertidal regions of the Zwartkops

commensalism; zonation on mud flats and

estuary, near Port Elizabeth, South

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Macnae, W. (1957)

J.Ecol., 45:361-87

Africa. Part II

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571044

Macan, T.T. (1957) 571041 Trans. Soc. Brit. Ent., 12(5):129-56 The life histories and migrations of the Ephemeroptera in a stony stream

Monthly collections were made over a period of three years from a stream in the Lake District, and the life histories Continuation of 571043, under main of seven species studied. Of these, only; headings: intertidal animal communities; Ephemerella ignita is a true summer: species passing the rest of the year as dormant eggs; the remainder grow in autumn and spring. Variations in life histories from place to place are ultimately due to high summer temperatures and possibly oxygen defliciency.

nutritional relationships; biotic factors influencing distribution;

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sand banks.

FAO: sjh

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Madsen, F.J. (1957) Bull.Inst.franc.Afr.noire, A.Sci. 19:474-81 On a new species of Meoma, and on other echinoids from tropical Wes Africa Description of new sp. with remar Brissopsis lyrifera, Plagiobrissu costae, Cidaris cidaris nuda and Echinus acutus mediterraneus.	a few	Mairs, E.H. (1957) Sea Frontiers, 3:149-61 Is the centerboard up? Historical study of the center the apparent disappearance of board boats and their recent reappearance.	,
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Main, A.R. (1957) Aust.J.Zool., 5(1):30-55 Studies in Australian amphibia. I genus Crinia Tschudi in South-Wes Australia and some species from S Eastern Australia The Western Australian representa of the genus Crinia Tschudi are r Life history data are presented.	tern outh-	Maksunov, V.A. (1957) Zool.Zh., 36(2):238-44 Certain data on morphology an of Capoetobrama kuschakewitsc of the river Syr-Darya Notes on life history of the	hi (Kessler)
GLK: hr	F	FAO:tl	Ŧ
Maine, Department of Sea and Shore Fisheries (1957) Augusta, 43 p. Commercial fisheries of Maine	571047	Malacea, I. et al. (1957) Bul.Inst.Cerc.piscic.Roman., Cercetaripreliminare asupra d apelor piscicole prin scurger de la topitoriile de in si ci (Preliminary studies on the d fishing waters by residual fl linen and hemp pits). Fr A study of the residual water and their effect on the recei with recommendations for thei	egradarii i reziduale nepa egradation of ow from Ru s composition ving rivers
	M	FAO:hr	F

Malmberg, G. (1957) 571051 Skr.sverig.FiskFören, Arsskrift 1956, 19-76

Om förekomsten av Gyrodactylus på svenska fiskar (On the occurrence of Gyrodactylus on Swedish fishes). En

Anatomy of the species, ecology, influence on the fish and description of species of Gyrodactylus occurring in Sweden.

Mandelbaum, H. (1957) 571054
Trans.Amer.geophys.Un., 38:867-78
Wind influence on a rotary tidal
current

Results of investigations on the influence of prevailing wind direction on the rotation of tidal and residual current at Amrum Bank in the German Bight.

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Mancuso, V. (1957) 571052

Ric.sci., 27(10):3049-51

La citocromo-ossidasi nell'uovo in
sviluppo di Sphaerechinus granularis
(Cytochrome-oxidase in the developing
egg of Sphaerechinus granularis)

Cytochrome-oxidase distribution during the larval development of <u>Sphaerechinus</u> was followed by Nadi reaction.

Manning, J.A. (1957) 571055 Quart.Rep.Fish.Res.Mar.Lab.Miami Univ., (57-4:12 p.

Summary of investigations on the pelagic fish survey of Chilean waters with special reference to the swordfish, marlins and tunas.

A preliminary study of the migration, food, reproductive behaviour, and habitat preference of swordfish (Xiphias gladius) and marlins (Makaire sp.).

FAO:glk

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FAO:sjh

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Mandelbaum, H. (1957) 571053
Trans.Amer.geophys.Un., 38(4):584-5
Discussion of "Evidence for a critical wind velocity for air-sea boundary processes" and 'Change in the relation-ship between wind and surface water movement at higher wind speeds"

Discussion of the original articles by Mandelbaum, H. (1956), Trans.Amer. geophys Un., 37(6):685-90, and by Lawford, A.L. et al. (1956), Trans.Amer. geophys.Un., 37(6):691-3. The results obtained with different methods for the relationship between wind velocity and surface water movement.

Manning, J.H. (1957) 571056
Resour.Stud.Rep.Md, 11:1-25
The Maryland soft-shell clam industry
and its effects on tidewater resources

A report including basic information concerning the soft-shell clam (Mya arenaria), the industry it supports, the gear used in its exploitation, and the effects of that gear on tidewater resources.

GLK: tl

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FAO:sjh

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(The Portuguese oyster in Brittany)

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reproduction considered in relation to environmental conditions and the availability of food; discussion of the origin of sets that have been

observed in the Morhiban Basin.

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dans les étangs (Destruction of
overgrown algae in ponds)

Results of experiments to destroy Spirogira with copper sulphate.

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(The tunny fishery in Norwegian waters).

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Data on recapture and migration of transplanted cels.

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A record of catches of the following species: Carcharias taurus, Cetorhinus maximus, Galeocerdo cuvier, Gymnura altavela, Aetobatus narinari, Albula vulpes, Microgadus tomcod, Hoplostethus mediterraneus, Scriola zonata, S. falcata, S. fasciata, Coryphaena hippurus, Euthynnus alleteratus, Microgobius thalassinus, Evorthodus lyricus, Gobionellus boleosoma, Prionatus s. scitulus, P.t. tribulus, Hippoglossus hippoglossus, Remora australis.

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Resources (1957)
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Ill. description of this State of Maryland marine laboratory, and of its staff and activities.

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Bear lake; its fish and fishing

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Reports investigations on the life history, creel census results, history of planting, methods of catching of cutthroat. Incl. notes on exploitation phase of the present population.

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system is described.

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slope water off the Scotian Shelf and

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In the slope water investigations a

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Reports on results of experiments to determine the optimum trapping interval.

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571116 System. Zool., 6(1):29-40 Utilization of X-rays as a tool in systematic zoology

Discusses briefly different types of radiation, pointing out the value and limitations of the techniques, and presents data from experiments with different types of X-ray machines.

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<u>Vop.Ikhtiol.</u>, 8:155-9

K voprosu o biologii i promysle saidy
(<u>Pollachius virens</u> L.) v Barentsevom

more (Questions concerning the
biology and industry for the said
(<u>Pollachius virens</u> L.) in the Barents
Sea)

Seasonal distribution maps.

Mistakidis, M.N. (1957) 571128 Fish.Invest., Lond., Ser.2, 21(4):52 p. The biology of Pandalus montagui Leach

A detailed account, under the following headings: introduction and review of literature; description of fishery in the Thames Estuary; breeding; sex change; growth; food; migrations; parasites.

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Estimates from scale readings and by Peterson's method of Bertalanffy growth coefficients for 9 spp. of Seriola, Trachurus, Caranx and Decapterus. Gives some age compositions.

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Mitani, F. (1957) 571130 Bull. Jap. Soc. sci. Fish., 22:605-8 (Correlation between catches of fishing grounds and secular variation in the catch of the yellow-tail, Scriola quinqueradiata, along the Pacific coast of Japan). Ni

Analysis of catch data from 1915 to 1954; distinguishes three areas according to kind of variation; correlation between catches in different prefectures; relation of variations to hydrographic and meteorological factors.

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Examination of the role of temperature as determinant of (1) the variation in the number of vortebrae and fin rays (2) abnormalities in the vertebral column, (3) growth, (4) mortality, and comparison of these results with the features presented by natural populations.

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(On the observation of scale pattern of pink salmon). Ni

Counts of circuli in resting zones of scales of Oncorhynchus keta Walbaum in Japan and Okhotsk Seas and N.W. Pacific permit differentiation of stocks.

Molinier, R. and

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Aporçu bionomiquo sur les peuplements marins littoraux des côtes rocheuses mediterranéennes de l'Espagne (Bionomic survey of the coastal stocks of the rocky Mediterranean coasts of

A study of the distribution of organisms . on different types of coast.

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Short note on very low frequency waves believed to originate from far distant storms.

A record of the first specimen of the species obtained in Australian waters, encompassing the description of the specimen and discussion of the taxonomic position.

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571156 571153 Lunroe, E. (1957)Munro, I.S.R. (1957) Fish. News Lett. Aust., 16(8):15-8 Science, 126:437-9 Comparison of closely related faunas Handbook of Australian fishes Short discussion of general nature of Section 14, pages 57 to 60 of this differences between faunas and taxonomic handbook being published in discusses a method useful for serial form. comparison and assessment of differences. Particular reference to rate of differentiation fish in large tropical lakes and temperate rivers. FAO:glk M GLK:sjh 571157 Muraour, P. (1957) 571154 Munro, I.S.R. (1957) Bull.sta.Aquic.Pêche Castiglione, Mon. Ser. Bull. W. Aust., 6(5):88-90 (8):29-38 The Australian species of Scomberomorus Sédiments et sédimentation au large de lacepede la région située entre le Cap Tedlès et la Pointe de l'Aīt-Raouna (Est de An illustrated key for the distinction Tighzirt) (Sediments and of the species of Scomberomorus of sedimentation off the region between Australia: S. (Cybium) commerson, S. Cape Tedlès and the Point of l'Aīt-(Cybium) queenslandicus, S. (Sawara) niphonius and S. (Indocybium) semi-Raouna (East of Tighzirt)) fasciatus. Lists the organisms of the samples taken and chemical composition of the same. M M FAOchr GLK: hr 571158 Muromtsev, A.M. (1957) 571155 Munro, W.R. (1957) C.R. Acad. Sci. U.R. S.S., 116:776-9 Freshw.Salm.Fish.Res., 16:16 p. Tipy godovogo khoda temperatury vody v The pike of Loch Choin poverkhnostnom sloe okeana) (Patterns of annual temperature in surface layers Information on the biology of Esox lucius L. (length-weight, relationship, of the occan) age, growth, maturity and food habits) Description and analysis of factors, which and standing crop in a Scottish loch influence the temperature of water: devoid of other fishes except Anguilla. radiation balance of the area and vertical advection.

FAO: wad

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Murray, R.W. (1957) 571159
Nature, Lond., 179:106-7
Evidence for a mechanoreceptive function
of the ampullae of Lorenzini

An investigation of the possibility of mechanical sensitivity in the ampullary system of Raia clavata using an electrical recording technique.

Musacchia, X.J., B.J. Sullivan 571162 and C.G. Wilber (1957) Copeia, (1):10-2

A comparison of liver and muscle lipids in arctic fishes

Estimations of tissue fatty acids, cholestral and phospho-lipid in Mallotus catervarius, Dallia pectoralis, Boregadus saida and Myoxocephalus quadricornis freshwater and marine species from Alaska.

GLK:hr

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Murty, C.B. (1957) Curr.Sci., 26(3):80

571160

Water masses of the Western central Bay of Bengal during November

Presentation of T.S. diagram and the nomenclature of water masses.

Mužinić, R. (1957) 571163 Bilješke, Split, (12):4 p. Sur la croissance de la jeune sardine (Sardina pilchardus Walb.) dans les eaux de Split (Growth of the young sardine (Sardina pilchardus Walb.) in the waters of Split)

Sardines of first spawnings, during the first growth phase, are 6 to 15 cm long. Specimens from late spawnings grow during the second phase slower than the specimens of first spawnings.

FAO:tl

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571161

GLK:hr

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Musacchia, X.J. and M.C. Clark (1957) Physiol. 7001... 30(1):12-7

Physiol.Zool., 30(1):12-7
Effects of elevated temperatures on tissue chemistry of the arctic sculpin Myoxocephalus quadricornis

A study was made of the effect of elevated temperatures on the total fatty acids, total cholesterol, cholesterol esters, and phospholipid of the liver and skeletal muscle from the sculpin, Myoxocephalus quadricornis, an arctic fish.

Nafe, J.E. and

571164

C.L. Drake (1957)

Annual Meeting, Washington, D.C., April 29 - May 2, 1957

A comparison of deep and shallow water marine sediments

FAO: sjh

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Nakamura, N. and 571165 Naranjo Betancourt, A. (1957) S. Kasahara (1957) Banco Nacional de Fomento, División Bull. Jap. Soc. sci. Fish., 22:674-8 Técnica Tegucigalpa, D.C., Honduras, (A study on the phenomenon of the Tobi-C.A., 136 p. Koy or shoot carp. III. On the result of Investigación y estudio de puertos culturing the modal group and the growth pesqueros de Honduras, costa norte y of carp fry reared individually). costa sur (Investigation and study Ni of the fishing ports of the northern and southern coasts of Honduras) Experiments on selection of Cyprinus carpio for growth characteristics A study of the present fishing demonstrate effect of food competition activities of Honduras with on growth variation. recommendations for its future development. SJH:sjh FiB:hr M Nakano, E. and A. Monroy (1957) 571166 Naumov, D.V. (1957) 571169 Experientia, 13:416-7 C.R. Acad. Sci. U.R.S.S., 112:65 A method for the incorporation of radio-Zhizennyi tsikl gidromeduzy Cladonema active isotopes in the sea urchin egg pacifica Naumov (The life cycle of the hydromedusa Cladonema pacifica Description of the method, which avoids Naumov) long incubation, involving injection of the isotope into the body cavity of the adult female. FAO FAO:glk M M Nakatsu, L.M. (1957) 571167 Navarro Dagnino, J. (1957) 571170 Comm. Fish. Rev., 19(12):5-8 Barcelona, Gill, 151 p. A review of the soupfin shark fishery of Vocabulario marítimo inglés-español y the Pacific coast español-inglés (Maritime dictionary English-Spanish and Spanish-Distribution, biology, landings and English) utilization of Galeorhinus zyopterus from south California to north British Columbia. FAO:sjh IVIM

Naylor, E. (1957) 571171 Needham, A.E. (1957) 571174 Nature, Lond., 180:616-7 Nature, Lond., 180:1293 Introduction of a grapsoid crab. The quadratic relation in differential Brachynotus sexdentatus (Risso), into growth British waters Discussion of application of polynomial Report of observations of the presence of rather than logarithmic equation to this crab, the conditions under which continuously varying allometric growth it is living, and discussion of the ways in carapace width and abdominal width in which it might have been introduced of female pea crab, Pinnotheres pisum. from the Mediterranean. GLK: 717 GLK:sjh Naylor, E. (1957) 571172 Neill, W.T. (1957) 571175 New Sci., 2(50):21-3 Copeia, (1):43-7 Immigrant marine animals in Great Distributional notes on Georgia Britain amphibians, and some corrections Illustrated account of immigration from Content as per title with comments America, Australia and Asia of Velella, on herpotogeographic errors and Elminius and Lepas (barnacles), Planes, Brachynotous and Pachygrapsus (crabs), omissions. Mercierella (tube-warm), Gryphaca (oyster) and spp. of other genera. FAO: sjh M HR:efa Naylor, M. (1957) Nemoto, C.M. (1957) 571176 571173 Nature, Lond., 180:46 Progr. Fish Cult., 19:147-57 An acetocarmine squash technique for the Experiments with methods for air fucales transport of live fish Describes experiments, mainly with Describes new cytological technique, Lepomis macrochirus and Tilapia mossamapplied to Fucus, Cystoseira, Himanthalia pica, to provide adequate oxygen supply and Halldr, s. and to control the accumulation of metabolic wastes during transport by plane. Specific recommendations are made involving the use of oxygen in sealed containers, an adsorptive agent and sodium amytal.

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GLK: sjh

Nepgen, C.S. de V. (1957) 571177 Invest.Rep.Div.Fish.S.Afr., (28):30 p. The South African pilchard (Sardinops ocellata and the maasbanker (Trachurus trachurus) - The euphausiids of the west coast of South Africa

Discussion of methods used, followed by a discussion of the general occurrence, seasonal variations and distribution. After brief notes on each of the species found, the general occurrence of euphausiids is correlated with cortain hydrological factors such as temperature and salinity.

Netherlands. Royal 571180

Meteorological Institute (1957)

Gravenhage, 91 p.

The Mediterranean oceanographic and meteorological data. En Ne

Marine climatological atlas containing monthly charts on general currents and air circulation, pressure, air and sea surface temperature, fog and precipitation and current and wind roses.

FAO:hr

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Netherlands, LandbouwEconomisch Instituut.
Afdeling Visserij (1957)

Rapp.Landbouw-Econ.Inst., (270):53 p.

Diagnosc-rapport visserij 1956.

Voorlopige berekening van de
bedrijfsersultaten van de visserij
over 1956 (Diagnostic report on
fisheries - 1956. Provisional
calculation on the trading results in
fisheries for 1956)

Neumann, G. (1957) 571181
Port Engr., 6(2):18-23
Generation and growth of ocean waves
under wind action

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Netherlands. LandbouwEconomisch Instituut.
Afdeling Visserij (1957)
Rapp.Landbouw-Econ.Inst., 257:93 p.
Onderzoek naar de bedrifjferesultaten
van de garnalenfisserij in 1954 en 1955
(Investigation on the commercial results
of the shrimp fishery in 1954 and 1955)

Newcombe, C.L. (1957) 571182

<u>Bull.ecol.Soc.Amer.</u>, 38:100.

The potential use of mcromictic lakes for disposal of radioactive wastes

Abstract of paper presented at the meeting of the Ecological Society of America, Indianapolis, December 27-29, 1957.

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GLK:glk

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Newell, A.E. (1957) 571183

Progr.Fish Cult., 19(2):76-80

Two-year study of movements of stocked brook trout and rainbow trout in a mountain trout stream

Experiments with Salvelinus fontinalis and Salmo gairdneri in a New Hampshire, USA, stream.

Nicolet, M. (1957) 571186

Nature, Lond., 180:7-10

The International Geophysical Year

Lists oceanographic and other stations, by regions.

WAD: wad

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571184

GLK:sjh

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New Zealand. Marine
Department (1957)
Rep.Fish.N.Z., 1956, 40 p.
Report on fisheries for 1956

Statement of weight and value of catch taken, its species composition and origin by port of landing; craft engaged, and methods of capture. Notes on exports and imports, fish-liver oil, and particular fisheries. Account of freshwater fishery activities and of freshwater and marine research. Detailed statistical tables.

Niculescu-Duvaz, M.

571187

and Gh. Barca (1957)

Bul.Inst.Cerc.piscic.Roman., 16(2):21-8

Orientarea problemelor de economie

piscicola in scopul ameliorarii agropiscicole a regiunii inundabile a

Dunarii (Orientation of problems of
the economy of fisheries in consequence
of the amelioration of agriculture and
fishculture in the flood plain of the

Danube). Ru Fr

Discussion, with proposed land-use map.

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Nicolai, E. (1957) 571185

Bature, Lond., 180:491-3

Wall deposition in Chaetomorpha melagonium (Cladophorales)

Gives data obtained about the first wall laid down and the stage of development at which cross-striation pattern makes its appearance.

Nielson, R.S., N. Reimers 571188 and H.D. Kennedy (1957)

Calif.Fish.Game, 43(1):5-42

A six-year study of the survival and vitality of hatchery-reared rainbow trout of catchable size in Convict Creek, California

Describes controlled year long experiments using hatchery Salmo gairdneri and wild Salmo trutta.

GLK:efa

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HR: wad

F

Nikolskii, P.D. (1957) 571189
Fish.Ind., Moscow, 33(1):70-1
Opyt dvukhkratnogo ispol'zovaniia prudov
za odin vegetatsionnyi period (Test
concerned with using ponds twice during
one vegetative period)

Nishibori, K. (1957) 571192

<u>Bull.Jap.Soc.sci.Fish.</u>, 22:713-4

(Studies on pigments of marine animals.

IV. Astacene from the liver oil of cuttle-fish, <u>Ommastrephes</u> sloani pacificus Streentrup). Ni En

Reports a biochemical and spectrographic analysis.

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Nikonorov, I.V. (1957) 571190

Fish.Ind., Moscow, 33(2):79-81

Vidoboi i razmernyi sostav ulovov kil'ki rybonasosom i konusnoi set'in

(Species and size composition of northern pilchard catch with a fish pump and a conic net)

Nishibori, K. (1957) 571193
Bull.Jap.Soc.sci.Fish., 22:715-7
(Studies on pigments of marine animals.
V. Carotenoids from the red muscle and the viscera of giant shield shell,
Tugali gigas). Ni En

Reports a biochemical and spectrographic analysis.

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Nishibori, K. (1957) 571191
Bull.Jap.Soc.sci.Fish., 22:708-12
(Studies on pigments of marine animals.
III. Echinochrome A from the spines of sand-dollar Echinarachnius mirabilis).
Ni En

Reports a biochemical and spectrographic analysis.

Noble, E.R. (1957) 571194

J.Mar.biol.Ass.U.K., 36(1):143-55

Seasonal variations in host-parasite relations between fish and their protozoa

A study of host-parasite relations between three species of marine fish and their protozoa was made at Plymouth.

Callionymus lyra was more heavily infected with protozoa than were the other two species of fish. Gadus merlangus was less heavily parasitized.

G. merlangus, however, was more heavily parasitized with worms than were the other two fish. In Microstomus kitt the intensity of infection was generally low.

HR:hr

SJH:sjh

Hydrobiology, 9(4):346-60 Beiträge zur Limmologie und fauna ungarischer Natrongev (Contributions to limmology fauna of Hungarian "Sodium-Limmological description of containing high amounts of carbonate, list of the zoop organisms and description on sp. and n.f. of rotifers these waters.	vässer vand rotifer vaters") the water sodium clankton of several	Morthcote, T.G. (1957) Management Publ.Br.Col.Game Co. Common diseases and parasites water fishes in British Columb: Includes a key to their identicand also contains an account or miscellaneous abnormalities.	of fred ia ficatio
FAO: tl	Ŧ		न
Nordli, E. (1957) Nytt Mag.Bot., 5:13-6 Algal flour extract as a stagent for marine dinoflagel. Account of observations on of benthic algae upon the grant marine flagellates.	late cultures the influence		571; <u>Iw</u>
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FAO:efa	Īſ.	SJH	MF ·
FAO:efa Norris, K.S. (1957) Calif.Fish Game, 43:317 Second record of the green secuthern California Descriptive note on speciment Acipensor medirostris Ayres 27/4/57 in 18 feet of water, Point Vicente, Los Angeles. Wt = 3 lb 14 oz.	571197 sturgeon in as of speared on N. of	Nun, M. (1957) Fish.Bull., Haifa, (11):21-5 (Fishing in the Old Testament). Article ill. with Egyptian relie	5712 <u>Iw</u>

Nun, M. (1957) 571201 Ochiai, A. (1957) 571204 Fish.Bull., Haifa, (14):20-4 Bull. Jap. Soc. sci. Fish., 22(9): 522-5 (Seafarers and fishermen in the Jewish-(Zoogeographical studies on the soleoid Roman war). Ιw fishes found in Japan and its neighbouring regions - I) Ni Figures of coins and mosaics. Quantitative distribution at representative localities is analysed by Schenck and Keen's method. SJH:sjh IÆ SJH: tjj M Nunes-Ruivo, L. (1957) 571202 Ochiai, A. (1957) 571205 Rev. Fac. Sci. Lisboa, 5(2):230-52 Bull. Jap. Soc. sci. Fish., 22(9):526-30 Contribution à l'étude des variations (Zoogeographical studies on the soleoid morphologiques de Clavella adunca fishes found in Japan and its neigh-(H. Ström). Copepode parasite de Gadus bouring regions - II). Ni callarias L. Considérations sur quelques Clavella parasites des Gadidae Redfins popularity and attempts to (Contribution to the research on morphoelucidate distribution pattern of logic variations of Clavella adunca species in five faunal subdivisions of (H. Ström). Copepode parasite of Gadus Japanese waters. callarias L. Considerations on some Clavella parasites of Gadidae) Taxonomic with account of morphology. GLK: glk M SJH: tjj М Nystedt, L. (1957) 571203 Ochiai, A. (1957) 571206 <u>Int.hydr.Rev.</u>, 34(2):95:101 Bull. Jap. Soc. sci. Fish., 22(9):531-5 Calcul automatique des réseaux (Zoogeographical studies on the soleoid hyperboliques (Automatic calculation fishes found in Japan and its neighof hyperbolic grids) bouring regions) - III). Study of the possibility of increasing Discusses 'phylogenetic' migration and precision by the use of an electronic relation of surface 'isothermals' with calculator when drawing hyperbolic lines, dispersal. with information on a Swedish machine for this purpose.

SJH: tjj

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Odiorne, J.M. (1957) In "The Physiology of Fishes". Vol. II. Behaviour. Edited by M.E. Brown, Academic Press Inc., Publishers, New York, pp. 387-401 Color changes

Ogino, C. and M. Suyama (1957) Bull. Jap. Soc. sci. Fish., 23(4): 227-9 Variations in amino acid composition of protein during the development of egg and the growth of young fish of rainbow trout. Salmo irideus

Report on analysis of cultured samples; significance of results with regard to suitable dict-protein in rearing; comparison with brook trout.

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SJH:sjh

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Odum, H.T. (1957) 571208 Ecol. Monogr., 27(1):55-112 Trophic structure and productivity of silver springs, Florida

The springs are described as being a thermostatic, chemostatic and biostatic ecological community in seasonally pulsing steady state climax. Structure and properties are described; metabolism and production are measured and a community budget is presented.

Oguri, M. and T. Hibiya (1957) 571211 Bull. Jap. Soc. sci. Fish., 22:621-5 (Studies on the adrenal glands of teleosts. I. Some observations from the viewpoint of the comparative histology). Ni En

Reports and illustrates histological studies on head kidneys and Stannius bodies of Carassius auratus, Parasilurus asotus and Hexagrammos otakii.

GLK:glk

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Ogino, C. (1957) 571209 J. Tokyo Univ. Fish., 43(1):7-11 An improved procedure for paperchromatographic determination of amino acids teleosts - II. On the adrenal tissues in

Description of one dimensional method using several buffered solvent mixtures after initial separation by ion-exchange resin treatment.

Oguri, M. and T. Hibiya (1957) 571212 Bull.Jap.Soc.sci.Fish., 23(3):144-9 Studies on the adrenal glands of 15 species of fishes

Comparative histological examination of acidophil and chromaffin cells in head kidneys and Stannius bodies of Salmo, Parasilurus, Carassius, Cyprinus, Misgurnus, Anguilla, Channa, Plotosus, Niphon, Prionurus, Pterois, Hexagrammos, Lepidotrigla, Hoplobrotula and Paralichthys.

FAO: sjh

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Olson, F.C.W. (1957) Spart.J.Fla Acad. Soi., 20(1):93-4 A scaball from Escambia County, Florida Description of the ball. CLK:glk Committee (1957) Special Interim Fisheries Committee (1957) Special Interim Fisheries Committee Committee Clomic Corporation (1957) Special Interim Fisheries Committee Co	Oliver, J.H. (1957) Nature, Lond., 180:617 Production of carbon in the so Discussion of the significance production in experiments in measurement of carbon product: the sea.	of oxygen the	Orange, C.J., M.B. Schaefer and F.M Larmie (195) Bull.interam.trop.Tuna Comm., Schooling habits of yellowfin (Neothunnus macropterus) and si (Katsuwonus pelamis) in the ea Pacific Ocean as indicated by seine catch records, 1946-1955 En Es Frequency distributions of catmixing of species.	2(3):83-126 tuna kipjack stern purse
GLK:glk CLK:glk Committee (1957) Coganisation for European 571218 Economic Co-operation (1957) Paris, O.E.E.C., Projets, (136, 145) Air and water pollution. The position in Europe and in the United States CLK:glk CLK:glk	GLK:glk	Īи	SJH:sjh	M
Omura, H. (1957) 571215 Norsk Hvalfangsttid., 46:374-90 Report on two right whales caught off Japan for scientific purposes under Article VIII of the International Convention for the Regulation of Whaling Preliminary report of a study of two right whales encompassing the following items: colour of the body and external parasitism, proportional measurements, baleen and food, weight, reproductive organs, skeleton.	Quart.J.Fla Acad.Sci., 20(1):93 A seaball from Escambia County	3-4	Special Interim Fisheries Committee (195) Salem Report for 1955-1957 to the Gothe State of Oregon and the for	7)
Norsk Hvalfangsttid., 46:374-90 Report on two right whales caught off Japan for scientific purposes under Article VIII of the International Convention for the Regulation of Whaling Preliminary report of a study of two right whales encompassing the following items: colour of the body and external parasitism, proportional measurements, baleen and food, weight, reproductive organs, skeleton. Economic Co-operation (1957) Paris, O.E.E.C., Projets, (136, 145) Air and water pollution. The position in Europe and in the United States	GLK:glk	Μ		MF
organs, skeleton.	Norsk Hvalfangsttid., 46:374-9 Report on two right whales can Japan for scientific purposes Article VIII of the Internation Convention for the Regulation Whaling Preliminary report of a study right whales encompassing the items: colour of the body and parasitism, proportional measure	of two following external arements,	Economic Co-operation (1957) Paris, O.E.E.C., Projets, (136) Air and water pollution. The po) , 145) osition in
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Organisation des Nations 571219 Orr.A.P. (1957)Unies pour l'Education, la J.gen.Microbiol., (Symp.on plankton), Science et la Culture (1957)16:273 UNESCO, Paris, 244 p. Some factors affecting the sinking rate Ecologie humaine et animale. Compte of diatoms rendu de recherches (Human and animal ocology. Reviews of research) MFMF Orian, A.J.E. and 571220 Orr, W.L. and J.R. Grady (1957) 571223 H.G. Callan (1957) Deep-Sea Res., 4(4):263-71 J.Mar.biol.Ass.U.K., 36(1):129-42 Determination of chlorophyll derivatives Chromosome numbers of gammarids in marine scdiments The chromosomes of nine species of A rapid method is given for routine gammarids have been studied in occytes determination of acetone-soluble and embryos. There is no evidence that chlorophyll derivatives in marine polyploidy has played a part in gammarid sediments. The pigments are extracted evolution. Three of the species studied, from 10-100 g of wet sediment by acetone Gammarus pulex (L.), Marinogammarus and transferred to chloroform for marinus (Leach) and M. pirloti (Sexton spectrophotometric determination. and Spooner) show chromosal polymorphism. HR: hr GLK:tl M MOrmerod, L. (1957) 571221 Ortolani, G. (1957) 5711224 Harper, New York, 331 p. Ric.sci., 27(8):2475-8 The curving shore; the gulf coast Esperimenti di merogonia nell'uovo from Brownsville to Key West fecondato di ascidie (Experiments on merogany in the fertilized egg of ascidia) Fertilized oggs of Ciona intestinalis and Phallusia mamillata were cut, after the emission of the first or second polar body, in vertical and horizontal planes and the resultant development of the embryo was studied.

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Orton, G.L. (1957) Copola, (1):56-8 Enbryology and covolution of the polagic fish egg Discusses the characterisation of pelagic fish embryos, and offers some comments on the evolution and systematic interpretation of egg types in the fishes. HR:hr				
interpretation of egg types in the fishes. HR:hr INF GLK:hr MF Overbook, J. (1957) 571229 H.O. Yoshida (1957) Copeia, (1):58 Another record of the rare shark, Supretimeters bispinatus, from the Pacific Ocean Reports record of \$ specimen, with detailed position of capture. HR:efa M FAO:tl MF Outhwaite, L. (1957) 571227 Coward-McCann, New York, 479 p. A history of an ocean MF Owen, H.M. (1957) 571230 Bull.Mary.Sci.Gilf Coribb., 7(1):35-46 Eithlegisel studies on cyster mertality. II. Polydore websteria Hartmann - (Polychaete, Spionidae) Wern is a parasite of Crassostros virginica infestation is correlated with mortality of the cysters but not substantiated as a cause by laboratory experiments.	Copeia, (1):56-8 Embryology and evolution of the fish egg Discusses the characterization pelagic fish embryos, and off	he pelagic n of ers some	Turtox News, 35(1):16-22 The development of the Pacifieg Ill. descriptions of embryonicomprising period of cellular	c herring c stages division,
Otsu, T. and H.O. Yoshida (1957) Copeia, (1):58 Another record of the rare shark, Exprotomicrus bispinatus, from the Pacific Ocean Reports record of \$\frac{2}{3}\$ specimen, with detailed position of capture. M FAO:tl MF Outhwaite, L. (1957) Coward-McCann, New York, A history of an ocean M FAO:tl MF Owen, H.M. (1957) Bull.Mar.Sci.Culf Caribb., 7(1):35-46 Etiological studies on cyster mortality. II. Polydora websteri Hartmann - (Polychecte, Spionidae) Worm is a parasite of Crassostrea virginics, infestation is correlated with mortality of the cysters but not substantiated as a cause by laboratory experiments.	interpretation of egg types i		presence of a well-developed together with the time elapse	embryo,
H.0. Yoshida (1957) Copela. (1):58 Another record of the rare shark, Euprotomicrus bispinatus, from the Pacific Occan Reports record of \$ specimen, with detailed position of capture. HR:efa M FAO:tl MF Outhwaite, L. (1957) Coward-McCann, New York, 479 p. A history of an ocean Owen, H.M. (1957) Bull.Mar.Sci.Gulf Caribb., 7(1):35-46 Etiological studies on cyster mortality. II. Pelydora websteri Hartmann - (Polychaete, Spionidae) Worm is a parasite of Crassostrea virginics, infostation is correlated with mortality of the cysters but not substantiated as a cause by laboratory experiments.	HR: hr	ıæ	GLK:hr	MF
Outhwaite, L. (1957) Coward-McCann, New York, 479 p. A history of an ocean Owen, H.M. (1957) Bull.Mar.Sci.Gulf Caribb., 7(1):35-46 Etiological studies on cyster mortality. II. Polydora websteri Hartmann - (Polychaete, Spionidae) Worm is a parasite of Crassostrea virginica; infestation is correlated with mortality of the cysters but not substantiated as a cause by laboratory experiments.	H.O. Yoshida (1957) Copeia., (1):58 Another record of the rare sh Euprotomicrus bispinatus, from Pacific Ocean Reports record of \$\frac{1}{2}\$ specimen,	ark,	Z.Fisch., 5:285-8 Ein Bodenstecher zur Probeent flachen Gewässern (A bott for taking samples in shallow	tnahme in com grab v water)
Coward-McCann, New York, 479 p. A history of an ocean Bull.Mar.Sci.Gulf Caribb., 7(1):35-46 Etiological studies on oyster mortality. II. Polydora websteri Hartmann - (Polychaete, Spionidae) Worm is a parasite of Crassostrea virginica; infestation is correlated with mortality of the oysters but not substantiated as a cause by laboratory experiments.	HR: efa	M	FAO:tl	MF
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Özkul, I. (1957) 571231

Balık Balıkçılık, 5(2):25-7

Trawl sahaları hakkında (About trawling grounds)

Comments about the prohibitions on trawling.

Page, I.H. (1957) Sci.Amer., 197(6):52-6 Serotonin

Properties of substances found in blood, nervous tissue and tumors in clams, octopus and jellyfish which is connected with action of involuntary muscles and blood pressure and

SJH :sjh

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FAO:sjh

circulation.

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571234

Pack, Y. (1957) 571232

<u>Bull.Jap.Soc.sci.Fish.</u>, 22:657-61

(A model experiment of sardine trap net, "Hisago Ami"). Ni En

Illustrated account of tank experiments on resistance and relation of net configuration to water velocity on 1/350 scale model of traps used in Tai fishing ground off west coast of Wakasa Bay, Japan.

Palekar, V.C. and D.V. Bal (1957) 571235 Curr.Sci., 26(11):359-60 Occurrence of Bactronophorus thoracites (Gould), a marino wood borer, in Bombay

Record of wood borer from living mangrove trees.

SJH:sjh

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FAO:hr

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Paes-Da Franca, M.L. (1957) 571233
Trab.Miss.Biol.marít., (12-16):89-106
Contribuição para o conhecimento da
fauna malacológica de Angola. Moluscos
bivalves (Contribution to the
knowledge of the malacological fauna
of Angola. Bivalvular molluscs)

A catalogue of 11 families encompassing 18 genera and 26 species with notes and description of new forms.

Palevski, N. (1957) 571236

Bamidgoh, 9:29-32
On improving growing plans in fish ponds

Discussion of effect of faulty planning in causing the 1956 yield decrease in Affikim Co-operative Settlement.

FAO:hr

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WADssjh

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Palmer, G. and 571237
E.I. White (1957)
The Zoological Society of London, 96 p.
Zoological Record, Vol. 92, Sect. 15,
Pisces (1955)

Reference to 1136 publications dealing with fish, dated 1955; with subject and author indexes.

Pampapathi Rao, K. et al.(1957) 571240
Curr.Sci., 26:113
Occurrence of Martesia striata L. in
compact clay in the Krishna Ostuary
region

Content as per title.

FAO:sjh

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FAO: efa

MF

Palosuo, E. (1957) 571238

Morontutkimuslait.Julk., 174:1-14

Die Eisverhältnisse in den Finnland umgebenden Meeren im Winter 1955-56

(The ice conditions in the seas surrounding Finland during the winter of 1955-1956)

Content as per title.

TAO: ELA

and - 100 colors and 6 at 1

Pannier, F.P. (1957) 571241

Acta cient.venezol., 8:148-61

El consumo de oxigeno de plantas acuáticas en relación a distintas concentraciones de oxigeno (The oxygen consumption of aquatic plants in relation to different oxygen concentrations)

A study of the influence of the oxygen concentration on the rate of oxygen consumption by different plants, and the effect of oxygen on growth and cellular division.

FAO:tl

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Palosuo, E. (1957) 571239

Merentutkimuslait.Julk., 173:1-40

Jääpeitteen laajuuksien vaihtelu
vuosina 1931-56 (The extent of the
ice cover at the harbours on the
Finnish coasts)

Tabulated data.

Paquette, R.G. (1957) 571242

<u>Tech.Rep.Dep.Oceanogr.Univ.Wash.</u>, (52)

Conference on rapid data-handling in oceanography held at Lake Wilderness

Lodge, Maple Valley, Washington, 14-16

November 1956

FAO: tl

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Parkhurst, Z.E. and 571243 Patterson, T.L. (1957) 571246 Rev. canad. Biol., 16(4):505-6 (1957) M.A. Smith Progr.Fish Cult., 19(1):39 Changes in the normal motor and Various drugs as aids in spawning secretory responses in the stomach of rainbow trout a fish during spawning Short notes on the anesthetic effects Abstract only, describing experiments of sodium amytal, tricaine methanewith the cabezon, Scorpaenichthys sulfonate (M.S.222), methyl pentynol, marmoratus in aquaria. urethane, and chloretone. FAO: efa FAO:sjh M 571244 Parodiz, J.J. (1957) 571247 Penn, G.H. (1957) Ann. Carneg. Mus., 35(1):9 p. Tulane Stud. Zool., 5(10):231-63 New records of the freshwater gastropods Variation and subspecies of the crawfrom the Bahama Islands fish Orconectes palmeri (Faxon) (Decapoda, Astacidae) Defines the limits of variation and the geographic range of Orconectes palmeri palmeri, O. p. longimanus and O. p. creolanus. F \mathbf{F} FAO:hr Pasko, D.G. (1957) 571245 Pennak, R.W. (1957) 571248 N.Y.Fish Game J., 4(1):1-31 Limnol.Oceanogr., 2:222-32 Carry falls reservoir investigation Species composition of limnetic zooplankton communities Discussion based on data obtained from 27 Colorado (USA) lakes by the author compared with data from 42 selected lakes in other parts of the world, with special reference to species dominance. F HR: wad F

Pentelow, F.T.K. et al. (1957) 571249 Surveyor, Lond., 116:986-8 Sewage effluents and their effect on fish

Permutit, Co. Ltd. (1957) 571252

<u>B.P. 746,609</u>

Reducing the concentration of electrolyto

in a solution (particularly sea water)

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Pérès, J.M. (1957) 571250

Bull.Fac.Sci., Marseille, (12):4-21

Le problème de l'étagement des formations benthiques (Problems of zonation of benthic formation)

Discussion and comparison of different systems and nomenclatures of littoral zonations and proposal of a new system and nomenclature. Petruschevski, G. (1957) 571253
Z.Fisch., 5:235-46
Die Erforschung der Fischkrankheiten in der Sowjetunion (Investigation on fish diseases in the Soviet Union)

A review with numerous Russian references.

GLK:tl

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FAO:tl

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Pérès, J.M., J. Picard 571251 and M. Ruivo (1957) Bull.Inst.océanogr.Monaco, (1092:1-30 Résultats de la campagne de recherches du bathyscaphe F.N.R.S.III. (Results of the research expedition of the bathyscaphe F.N.R.S.III)

Contains the results of observations made on oceanographic conditions, plankton and benthos during six descents on the Portuguese coast.

Philip, J.R. (1957) 571254

<u>Ecology</u>, 38:107-11

Sociality and sparse populations

As asocial population of a sexual species is defined as one in which the individuals move in a random manner. The proporties of such a population are investigated and compared with those of a "social" population in which sparsity of population does not limit reproductive opportunity.

FAO:hr

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FA0:glk

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Philippines. Bureau of 571255
Fisheries (1957)
Manila, 61 p. (mimeo)
Fisheries statistics of the Philippines,

Annual tables for years 1946-55 for fish production, consumption and requirements; vessel and gear inventory; fish-ponds; foreign trade; transport; fishing grounds and regions.

Phillips, A.M. Jr. et al. (1957) 571258

Progr.Fish Cult., 19(1):19-25

A chemical comparison of hatchery and wild brook trout

Experiments on Salvelinus fontinalis indicate that natural foods produce trout superior in many chemical respects to trout reared on hatchery foods despite the assumed nutritional superiority of the latter.

GLK: sjh

1955

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WAD: wad

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Phillips, A.M., Jr. 571256 and G.C. Balzer (1957) Progr.Fish Cult., 19:158-66 The nutrition of trout - V. Ingredients for trout diets

Explains why food is necessary, what ingredients should be used, and the methods of measuring the efficiency of diets; tables list the chemical composition, the vitamin content of some foods and some diet mixtures.

Phillips, O.II. (1957) 571259

J.Fluid Mech., 2:417-45

On the generation of waves by turbulent wind

WAD: wad

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Phillips, A.M., Jr. 571257 and H.A. Podoliak (1957) Progr.Fish Cult., 19(2):68-75 The nutrition of trout. III. Fats and minerals

A review of the fat and mineral requirements in the animal body with specific reference to trout.

Piccard, J. and 571260 R.S. Dietz (1957)

Deep-Sea Res., 4(4):221-9

Oceanographic observations by the bathyscaph TRIESTE (1953-1956)

A brief description of the bathyscaph principle is given, followed by a summary of physical, biological and geological observations, which have been made thus far. The special advantages of the bathyscaph over conventional oceanographic ships are mentioned.

WAD: wad

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GLK:tl

Pickard, G.L. and 571261 Pierson, W.J., Jr. (1957) R.W. Trites (1957) Paper presented at the Thirty-Eighth J.Fish.Res.Bd Can., 14:605-16 Annual Meeting, Washington, D.C., Fresh water transport determination April 29 - May 2, 1957 from the heat budget with applications The directional spectrum of a windto British Columbia inlets generated sea. Part II. Analysis of data and results Describes a new method based on a heat budget analysis for determining the mean seaward movement of the brackish layer. The method is also applied to gain information on the mixing process and to determine the depth from which salt water is entrained into the surface layer. GLK: glk MF M 571262 Pidgaiko, M.L. (1957) 571265 Pillay, T.V.R. (1957) Vop. Ikhtiol., 8:129-42 Indian J.Fish., 4(1):150-9 Zooplankton prudov stepnoi zony Ukrainy On the abundance of the Hilsa, Hilsa (Pond zooplankton in the steppe zones ilisha (Hamilton) in the Hooghly and of the Ukraine) Padma rivers, during 1955 Discussion of qualitative and Length frequencies and racial quantitative characteristics of this composition. plankton which was composed of 18 species of cladocera, 17 species of copepoda and 23 species of rotatoria. MF FAO:glk GLK: glk Pillay, V.K. (1957) Pielou, E.C. (1957) 571263 571266 J.Ecol., 45:31-47 Proc. Indo-Pacif. Fish. Counc., 5:78-81 The effect of quadrat size on the Some factors controlling algal production in salt-water lagoons estimation of the parameters of Neyman's and Thomas' distributions A theoretical study of clustered distributions, tested by constructing and sampling artificial populations.

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FAO: sjh

Pimienta, J. (1957) 571267 Bull.Com.centr.Océanogr., 9(10):565-9 Lo delta de la Medjerda (Tho delta of the Medjerda)

Description of littoral and fluviatile phenomena and discussion of cyclothematic sedimentation.

571270 Piskunov, I.A. (1957) Zool.Zh., 31(1):115-21 On the fecundity of the herring (Clupea harongus pallasi V.) spawning along the western coast of the Sachalin Tsland

FAO: glk

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571268 Pinckard, W.F. (1957) Progr. Rep. Pacif. Cst Stas, (109):6-8 Pomfret off the British Columbia coast

Distribution map for figure of and notes on Brama raii especially in samples taken May-Sept., 1956. Stomach contents.

Planas Mestros, J. (1957) 571271 Invest.pesq., 7:99-103 Estudio sobre el contenido insulínico del atún atlántico (A survey on the insulin content of the Atlantic tuna)

Contains the results of measurements of insulin in pancreatic extracts of Thunnus thynnus.

GLK: s.jh

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Pirozhnikov, P.L. (1957) 571269 Zool.Zh., 36(8):1273-9 Raboty laboratorii gidrobiologii VNIORKH (The work of the hydrobiological laboratories of the Union Scientific Research Institute of Lake and River Fishery Economy

Account of new results obtained and the next problems to be attacked in researches on Lakes Hmen and Ladozh, the Obi and lower Volga rivers, and Finnish bays.

Plunkett, M.A. (1957) 571272 Dcep-Sea Ros., 4(4):259-62 The qualitative determination of some organic compounds in marine sediments

Four sodiment samples from the Caribbean Sea were analysed qualitatively for free sugars, amino acids and simple organic acids. Two of the samples were from an anacrobic basin; two were from aerobic areas. The sediments were extracted with hot water and 70 per cent ethanol. The organic materials in the extracts were separated and studied qualitatively on paper chromatograms.

FAO: gli

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Poisson, R., and G. Richard (1957) 571273 Popham, H. (1957) 571276 C.R. Acad. Sci., Paris, 244:1076-9 Hart-Davis, Lond., 207 p. Observations on swarms of corises Cape of Storms; trawling off the coast (aquatic heteropteran insects) in of north Russia Brittany during the summer of 1956 FAO Politis, J. (1957) Portugal. Comissão Central 571274 571277 C.R. Acad. Sci., Paris, 244:511-3 de Pescarias (1957) Cytology of formation of carotinoids in Ministério da Marinha, Lisboa, 55 p. some fih Estatística das pescas marítimas no continente e ilhas adjacentes no ano de 1952 (Marino fisheries statistics for the continent and adjacent islands in 1952) Production of fish, molluscs, crustacea and cetaceans by species, months, area and method of capture; vessels constructed and operating; numbers of fishermen employed. Includes data for brackish waters. FAO \mathbf{M} sjh. MF 571275 Polutov, I.A. (1957) Portugal. Comissão Central 571278 (1957)Fish Ind., Moscow, (1):13-6 de Pescarias Ministério da Marinha, Lisboa, 55 p. O zimnen tralovom promysle treski v vodakh Kamchatki (On the winter Estatística das pescas marítimas no trawl cod fishery in Kamchatkan waters) continente e ilhas adjacentes no ano de 1953 (Marine fisheries statistics for the continent and adjacent islands in 1953) Production of fish, molluscs, crustacea and cetaceans by species, months, area and method of capture; vessels constructed and operating; numbers of fishermen employed. Includes data for brackish waters. FAO M MF :sjh

Postel, E. (1957) 571279

Pêche marit., 36:298-9

La pêche en Tunisie (Fisheries in Tunisia)

Notes on the species of crustaceans

commercially caught in Tunisia.

Potter, E.C. (1957) 571282

J.appl.Chem., 7:309-17

Microdetermination of dissolved oxygen
in water. III. Titrimetric determination
of iodine in submicrogram amounts

FAO:hr

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Potter, E.C. (1957) 571280

J.appl.Chem., 7:285-97

Microdetermination of dissolved oxygen
in water. I. Nature of the problem

Potter, E.C. and 571283
J.F. White (1957)
J.appl.Chem., 7:317-28
Microdetermination of dissolved
oxygen in water. IV. Test of Winkler's reaction to below 0-001 p.p.m. of dissolved oxygen

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Potter, E.C. (1957) 571281 J.appl.Chem., 7:297-308 Microdetermination of dissolved oxygen in water. II. Design of water-sampling vessels

Potter, E.C. and 571284
J.F. White (1957)
J.appl.Chem., 7:459-67
Microdetermination of dissolved
oxygen in water. V. Development of
a self-testing and fully compensating
analytical method

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Powell, C. (1957) 571285 571288 Preddy, W.S. (1957) Int.hydr.Rev., 34(1):53-8 Challenger Soc., 3(9):32 The Thames estuary and its pollution. Le système de navigation "Decca" en hydrographie (The navigation IV. Prediction of conditions in the system "Decca" in hydrography) estuary A brief summary of some examples of the use of "Decca" in hydrography with some Abstr. of paper read at Joint Meeting of the Water Follution Research Laboratory, Stevenage; and Zoological leads for its present and future Society of London, Regent's Park, development. London. 24th and 25th January, 1957. Outline of method of calculating conditions of water from nature and amounts of effluents discharged. M EFF FAOshr SJH: efa Powell, R. (1957) 571286 571289 Pringsheim, E.G. (1957) Nature, Lond., 180:1296-7
Two species of Trachelomonas
(Euglenineae) without chlorophyll Quart.Bull.S.Pacif.Comm., 7(1):15-7 Pearl shell transfer in the Cook Islands Account of an experimental transplantation of Pinctada margaretifera, with A record of two heterotrophic forms: description of equipment. one may be \underline{T} . volvocing var. hyaling; the other is \underline{T} . reticulate. ME :glk 14GLK: wad Prasad, R. Raghu (1957) 571287 Pritchard, D.W. (1957) Paper presented at the Thirty-Eighth Indian J.Fish., 4(1):20-31 Annual Macting, Washington, D.C., April 29 - May 2, 1957 Seasonal variations in the surface temperature of sea-water at Mandapan On the question of non-tidal drift from January 1950 to December 1954 in estuaries Monthly maximum and minimum temperatures and monthly deviations from the "normal" as represented by the total monthly averages during the period, and relation between atmospheric and surface temperatures.

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GLK: glk

Privol'nev, T. (1957) 571291
Sci.and Life, Moscow, 24:63
Are there fish living without water?

Proudman, J. (1957) 571294

J.Fluid Mcch., 2:371-82

Oscillations of tide and surge in an estuary of finite length

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MF

Prophet, C.W. (1957) 571292 Res.Stud.St.Teach.Coll.Emporia, 5(3):

Seasonal variations and abundance of Cladocera and Copepoda and some physical-chemical conditions of the Fall and Verdigris rivers in Wilson and Montgomery Countries, Kansas

Provasoli, L., J.J.A. McLaughlin 571295 and M.R. Droop (1957) Arch.Mikrobiol. 25:392-428 Artificial media for marine algae

F

M

Prosser, C.L. et al. (1957) 571293

Physiol.Zool., 30(2):137-41

Acclimation of goldfish to low concentrations of oxygen

Experimental comparison of (1) critical concentration (break between independent and dependent metabolism), (2) oxygen—independent metabolism, (3) hacmoglobin concentration and red-cell count, (4) oxidative activity of tissues, in fish acclimated to low oxygen concentration and fish in aerated water.

Pucher-Petkovic, T. (1957): 571296

Acta adriat., 6:1-56

Etude du phytoplancton dans la région
de l'île de Mljet dans la période 19511953. (A study of the phytoplankton
in the region of the Island of Mljet
during 1951-1953). Hr

A quantitative and qualitative study of the phytoplankton of the lakes Mljet and of Gonoturska carried out concurrently with experiments of fertilization.

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Th.

Puke, C. (1957) 571297

Vandringsfisk.Medd., (6):8 p. (mimeo)

Naturdammsundersökningar i nedre

Norrland 1956 (Investigations on natural ponds in lower Norrland 1956)

Results of investigations on the production of salmon and trout smolt

in different ponds and the influence of different environmental conditions

Radan, G. (1957) 571300 Fish.Bull., Haifa, (14):12-3 (Attic fish plate). Iw En

Describes and figures a plate in possession of Haifa Maritime Museum, with identifyable fish (Torpedo, Sargus, and Pagellus) in the decoration.

TL:tl

on the production.

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SJH:sjh

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Rabouille, G. (1957) 571298

Bull.franc.Pisc., 30(187):37-47

La protection des eaux contre la pollution dans le bassin industriel de Longwy (The protection of water from pollution in the industrial basin of Longwy)

Describes methods of treatment of

Rae, K.M. (1957) 571301

Bull.Mar.Ecol., 4(38):247-69

A rolationship between wind, plankton distribution and haddock brood strength

Distribution of Metridia lucens; relationship between the wind and the distribution of Metridia, the movement of plankton and haddock brood strength in the northern North Sea.

FAO: hr

residues.

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FAO:tl

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Racek, A.A. (1957) 571299
Res.Bull.St.Fish., N.S.W., (2):209-41
Littoral Penaeidae from New South
Walcs and adjacent Queensland waters

Rae, K.M. (1957) 571302

J.gen.Microbiol.(Symp.on plankton),
16:265-7

Plankton around the British Isles

Summary on the significance of indicator species.

GLK

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Rahn, J. (1957) 571303 Dtsch.Fisch.Ztg, 4:70-2 Satzaale oder Aalbrut? (Stocking with eel or with eel fry?)

Discussion on the results of stocking of waters with eel and eel fry and profitability.

Ramasastry, A.A. et al. (1957) 571306 Proc.Indian Acad.Sci., 46B:293-323 Thermal field and oceanic circulation along the east coast of India

FAO:tl

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Rakestraw, N.W., P.L. Horrer 571304 and W.S. Wooster (1957) University of California Press, Berkeley and Los Angeles, 363 p. Oceanic observations of the Pacific 1949

Ranade, M.R. (1957) 571307 J.Mar.biol.Ass.U.K., 36(1):115-9 Observations on the resistance of Tigriopus fulvus (Fischer) to changes in temperature and salinity

Tigriopus fulvus can live normally within a salinity range of from 4.2 to 90%. In waters of salinities above 90% it falls into a state of apparent death from which it can recover if transferred back to lower salinities. The lethal temperatures vary between 32.0 and 41.8 C. depending on the salinity of the sca water, the lethal temperature being higher in higher salinities. The fluctuations in salinity and temperature

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Ralph, P.M. (1957) 571305 Trans.roy.Soc.N.Z., 84(4):811-54 New Zealand thecate hydroids. Part I. Campanulariidae and Campanulinidae

Reviews the New Zealand hydroid literature; keys the New Zealand families of thecate hydroids, the genera and species of New Zealand Campanulariidae and Campanulinidae; describes and discusses the systematic status of the New Zealand species of these two families; proposes certain changes in nomenclature; gives some new records. 571307 (Card 2)

in the pools where the animals were collected are well within their tolerance limits.

FAO:glk

71

HR: hr

Ranade, M.R. (1957) 571309 Rao, K.V.N. (1957) 571312 Nature, Lond., 179:151-2 J. Indian bot. Soc., 36:87-91 Reversal of phototaxis in the larvae of On a form of Raphidiopsis meditorranea Polydora pulchra Carazzi (Polychacta, Skuja Spionidac) Experiments indicating that direction of phototaxis is determined by salinity. GLK: wad 571310 Rao, K.V.N. and K.P. Rao (1957) 571313 Ranade, M.R. and J.S. Colman (1957) Nature, Lond., 180:711-2 Differences in the food of the young Rep.Mar.biol.Sta.Pt Erin, 69:34-9 Notes on the west pond at Port Erin and adult Indian mackerel, Rastrelliger kanagurta (Cuv.) Water temperature composition, and plankton content of sea-water pond When longer than 90 mm plankton forms the principal food. Below this size used for stocking fish, April-June, 1956, and comparison with local sea feeding is selective, and fish larvae form staple diet. Growth of gut is conditions in same period. allometric, and change in diet coincides with change of relative growth rate of gut. FAO: sjh M GLK: jae M 571311 Rapoport, E.H. (1957) 571314 Ranganathan, B. and Nature, Lond., 179(4560):637-8 C.A. Sastry (1957) J. Indian Inst. Sci., 39A:259-62 Population studies on three species of Vitamin requirements of Torulopsis Cladocera glabrata, a marine yeast Studies on the morphological changes (seasonal and local) of the Cladoceran Bosmina obtusirostris.

GLK:glk

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Rasmussen, B. (1957) 571315

Norsk Hvalfangsttid., 46:45-59

Exploitation and protection of the East
Greenland seal herds

A study of the biology, dynamics of the populations, catches, and measures of protection of the species of hairseals, hooded seal (Cystophora cristata) and harp sea (Phoca groenlandica).

Rattray, M., Jr. (1957) 571318 <u>Trans.Amer.geophys.Un.</u>, 38(4):495-500 <u>Propagation and dissipation of long</u> internal waves

The effect of friction on the propagation of long internal waves in a rotating ocean is investigated theoretically for the simple case of a two-layer system subjected to a constant eddy viscosity.

Waves of inertial period are excluded.

FAO:hr

in the Hudson river

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Rathjen, W.F. and 571316
L.C. Miller (1957)
N.Y.Fish Game J., 4(1):43-60
Aspects of the early life history of the striped bass (Roccus saxatilis)

Reed, C.A. (1957) 571319 Copeia, (1):51 Non-swimming water turtles in Iraq

Reports brief observations on nonswimming behaviour of <u>Clemmys caspica</u> caspica (Gmelin).

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Rattray, M., Jr. (1957) 571317 Trans.Amer.geophys.Un., 38(5):675-9 On the offshore distribution of tide and tidal current

The tides and tidal currents in offshore regions where the frictional effect is negligible are obtained from the tides at the adjacent shore stations by an approximate solution of the tidal equations.

Rees, C.B. (1957) 571320

Bull.Mar.Ecol., 37:211-46

Continuous plankton records: the distribution of Calanus finmarchicus (Gunn.) in the North Sea and northeastern Atlantic, 1946-1953

Distribution and seasonal and year to year variations in abundance. Life history and the different ecological requirements and different geographical distribution of the two different forms finmarchicus and helgolandicus.

FAO: tl

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571321 Rees, W.H. (1957) Reid, G.K. (1957) 571324 Fish.Res.Pap.Wash.Dep.Fish., 2(1):5-17 Copeia, (2):157-8 The vertical and horizontal distribution External morphology of an embryo whale of seaward migrant salmon in the forebay shark, Rhincodon typus Smith of Baker dam Contains description and dimensions of the specimen found in Texas waters. Experiments conducted spring 1955 with sets of nylon gill nets to study Oncorhynchus nerka and O. kisutch. Catches per unit effort in various positions and at various times; selectivity of nets, effect of weather conditions. FAO: sjh MF HR:efa M Rees, W.J. and E. White (1957) 571322 Reid, G.K. (1957) 571325 Discovery Rep., 29:129-40 Limnol.Oceanogr., 2:198-212 New observations on the aberrant Biologic and hydrographic adjustment medusa Tetraplatia volitans Busch in a disturbed gulf coast estuary Geographical and vertical distribution Hydrographic investigations of East Bay, and correlations to hydrographic Galveston, Texas, before and after the conditions. excavation of a pass, including the change of marine fauna in the bay. FAO:glk M HR: tl MF Regenthal, A.F. (1957) 571323 Reid, R.O. (1957) 571326 Fish.Res.Pap.Wash.Dep.Fish., 2(1):19-24 Tech.Memor.U.S.Army Eros.Bd, (93):33 p. Downstream migrant salmon survival in Modification of the quadratic bottomfree fall from a ski-jump spillway stress law for turbulent channel flow in the presence of surface wind-stress Survival of tagged Oncorhynchus kisutch after passage over Baker dam on Baker miver, Washington, USA. FAO: sjh MF M

neid, R.O. and 571327 K. Kajiura (1957)

Trans.Amer.geophys.Un., 38(5):662-6. On the damping of gravity waves over a permeable sea bed

The problem of damping of gravity waves over a permeable sea bed of great depth is re-examined, using a more rigorous approach than that employed by Putnam in 1949.

Remington, J.D. (1957) Sea Frontiers, 3:98-108 Saga of the sockeye

Popular account of the history of the salmon fishery in the Fraser river system.

FAO: tl

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Reimers, N. (1957) 571328
Calif.Fish Game, 43(1):43-69
Some aspects of the relation between stream foods and trout survival

Experiments and observations bearing on the general problems of winter trout food availability, trout vitality, and trout survival as related to food. Resovskaya, E.A.T. (1957) 571331

<u>Bull.Soc.Nat.Moscou</u>, 62(1):37-41

<u>Biological de-activation of water</u>

containing radio-active substances

by means of special ponds

HR: wad

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Reish, D.J. (1957) 571329 Industr.Wastes, 2:114-8 Effect of pollution on marine life Revelle, R. (1957) 571332 Science, 126(3287):1319-23 International cooperation in marine sciences

Account of UNESCO's marine science programme and of the Special Committee on Oceanic Research established by the International Council of Scientific Unions.

II

FAO: glk

Revelle, R. and 571333 Richardson, F. (1957) H.E. Suess (1957) Bull.Bishop Mus., Honolulu, 218:41 p. Tellus, 9:18-27 The breeding cycles of Hawaiian sea Carbon dioxide exchange between birds atmosphere and ocean and the question of an increase of atmospheric CO2 during the past decades From a comparison of c^{14}/c^{12} and c^{13}/c^{12} ratios in wood and in marine material and from a slight decrease of the C14 concentration in terrestrial plants over the past 50 years it can be concluded that the average lifetime of a CO2 molecule in the atmosphere before it is dissolved into the sea is of the order of 10 years. FAO:glk M M Reznichenko, O.G. (1957) 571334 Richardson, I.D. (1957) 571337 Zool.Zh., 36(9):1312-22 Fish. News Lett. Aust., 16(8):7-9 Ekologiia i kormovoe znachenie Ponto-Problems in mid-water trawling gammarus maeoticus (Sow.) Azovskogo moria (Bionomics and feeding value Reprint of article originally published of Pontogammarus maeoticus (Sow.) in the in "World Fishing (London)". sea of Azov) Observations of the distribution of Pontogammarus in connection with its behaviour, mode of life and feeding habits as related to the movement of the water. M M FAO: tl GLK: sjh Richardson, E.G. (1957) 571335 Richdale, L.E. (1957) 571338 Oxford: Clarendon Press; London: Oxford Elsevier, Amsterdam, 412 p. Technical aspects of sound. Vol.2. University Press, 195 p. Ultrasonic range, underwater acoustics A population study of penguins Includes information on fish as food of Megadyptes antipodes. M :sjh M

Experientia, 13(12):491-2
On the adenosine triphosphatase activity of the particulates of the egg of the sea urchin Paracentrotus lividus

Separation of mitochondria and measurement of ATPase activity.

FAO:glk

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571340

Riggs, C.D. (1957) Copeia, (2):158-9

Mugil cephalus in Oklahoma and northern Texas

Reports record of sp. and gives possible emplanation for presence.

HR :efa

MF

Riley, G.A. (1957) 571341 Limnol.Oceanogr., 2:252-70 Phytoplankton of the north central Sargasso Sea, 1950-52

Quantitative and qualitative analysis of phyto- and zooplankton, collected weekly by weather ship (35° N, 48° W). Estimation of basic organic production at that position. Investigations include also temperature measurement and Secchi disk readings.

Challenger Soc., 3(9):35
Recent chemical work in the Department of Oceanography, Liverpool

Abstr. of paper read at Joint Meeting of the Water Pollution Research Laboratory, Stevenage; and Zoological Society of London, Regent's Park, London, 24th and 25th January, 1957. Notes on recent developments in analytical chemistry of sca-water with particular reference to colorimetric determination of nitrate and use of micro diffusion for estimation of ammonia, total ionic inorganic nitrogen, and amino-nitrogen. SJH:efa

Riley, J.P. and

571343

P. Sinhaseni (1957)
J.Mar.biol.Ass.U.K., 36(1):161-8
The determination of ammonia and total ionic inorganic nitrogen in sea water

Microdiffusion using a Cavett flask has been employed instead of vacuum distillation for the separation of ammonia from sea water. The recovered ammonia is determined by a modification of the phenate-hypochlorite method. Raney nickel in the presence of ethylenediamine-tetraacetic acid has been used for the reduction of nitrate and nitrite to ammonia. The latter is separated by microdiffusion and determined colorimetrically. No

571343 (Card 2)

interference was encountered from a variety of organic nitrogen compounds.

HR; tl

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Hat. tl

T/A

Roberts, J.L. (1957) Risley, H.M. (1957) 571345 57134 Physiol.Zoöl., 30:232-42 J.Ass.Off.agric.Chem.Wash., 40:343-5 Determination of total solids and ether Thermal acclimation of metabolism in extract in fish and other marine the crab Pachygrapsus crassipes Randall. I. The influence of body size, products starvation, and molting Considers metabolism-size relations with regard to temperature, starvation and molting, and discusses the method, used to standardise grouped respiration data of crabs in specific experiments to a common weight as applied in acclimation studies reported elsewhere. M \mathbf{M} FAO:glk Rivero, J.A. (1957) Roberts, J.L. (1957) 571346 571349 Paper presented at the Inter-Island Physiol.Zoöl., 30:242-55 Marine Biological Conference, March 31 Thermal acclimation of metabolism in to April 6, 1957 the crab, Pachygrapsus crassipes Haematothalassia in Puerto Rico Randall. II. Mechanisms and the influence of season and latitude Description of the outbreak, observations made on fish mortality Study of adult phenotypic compensations and B₁₂ assays of deposits formed by the shore crab, Pachygrapsus from settling of the dinoflagellate. crassipes, with attempts to Abstract in "Report by the Institute characterise the pattern of development of Marine Biology, University of and the degree attained of respiratory Puerto Rico". acclimation to experimental temperatures in both local and latitudinally separated populations. Discussion of the ecological significance of temperature acclimation and of the structural level; HR:glk M at which it functions. FAO: glk Roberts, B. and 571347 Robertson, J.S. (1957) 571350 T. Armstrong (1957) Physiol.Rev., 37:133-54 Polar Rec., 8(55):306-16 Theory and use of tracers in determining The Arctic Institute, Leningrad transfer rates in biological systems Description of the institute and its Notes on terminology and mathematical activities. treatment of the results in different systems with and without recycling of tracers.

MF

FAO: tl

1: Suppl. 225

MF

FAO: tl

Robertson, O.H. (1957) Chif.Fish Game, 43(2):119-30 571351 Survival of precociously mature king lmon male parr (Oncorhynchus wischa Juv.) after spawning

_ = .onory, experiment and post-mortem of 60 ripe parr.

MAD: sjh

Robertson, O.H. and

B.C. Wexler (1957)

571352

Robins, C.R. (1957) 571355 Mar.Lab.Univ.Miami, 57-14:6 p. (mimeo) The Roger Firestone tarpon investigation. Progress Report, May, 1957

Robins, C.R. (1957) 571354 <u>Mar.Lab.Univ.Miami</u>, 57-13:1-8 (mimeo)

The Charles F. Johnson oceanic gamefish

investigations. A study of bluefin tuna

populations from the eastern and western North Atlantic based on an

No difference between groups of Thunnus thynnus in the Atlantic were found, but gill-raker differences between Atlantic and California stocks

show divergence of at least sub-

specific, and possibly specific order. If latter is confirmed, T. saliens is available name for California group.

analysis of fin-ray and gill-raker

57,1354

Notes on spawning, life history, adult migration and growth of the tarpon (Megalops atlantica).

Science, 125:1295-6. Pituitary degeneration and adrenal tissue hyperplasia in spawning Pacific salmon

Account of histological changes of this gland as sexual development proceeds; comparison with corresponding phenomena in the rainbow trout, and discussion of their significance with regard to senescence.

FAO:glk

FAO:tl

counts

FAO: sjh

MF

Robins, C.R. (1957) 11. Mar. Sci. Gulf Caribb., 7(3): 266-75 Lights of storms on the shallow-water fin. fauna of southern Florida with necords of fishes from Florida

I a importance of storms as a limiting lactor in the shoreward distribution I many fishes is noted. The specimens collected after a storm kill in the region of Miami, Florida, include . overal species previously unrecorded or of rare occurrence in Florida waters.

Robins, C.R. and 571356 E.C. Raney (1957) Tulane Stud. Zool., 5(12):291-318 The systematic status of the suckers of the genus Moxostoma from Texas, New Mexico and Mexico

Key; description and synonymy of each species with notes on coloration, sexual dimorphism and distribution.

122 . 1.:

M FAO: glk

F

Robinson, G.A. (1957) 571357 Rochford, D.J. and 571360 Bull.Mar.Ecol., 4:203-9 R.S. Spencer (1957) The forms of Rhizosolenia alata Oceanogr.Sta.List, 30:79 p. Brightwell Onshore and oceanic hydrological investigations in eastern and south-Differentiation of several forms by western Australia, 1956 size-frequency distribution of cells. Tabulated oceanographical data (including O2, pH, NO3-N and total P). FAO:sjh M GLK: tl M Rochford, D.J. (1957) 571358 Rochford, D.J. and 571361 Oceanogr.Sta.List, 28:1-88 R.S. Spencer (1957) Surface sampling in the Tasman and Oceanogr.Sta.List, 31:150 p. Coral Seas, 1955 Surface sampling in the Tasman and Coral Seas and the south-eastern Tabulated hydrographical data. Indian Ocean, 1956 Tabulated occanographical data (date, position, depth, T. Clo/oo and total P). GLK: tl Rochford, D.J. and 571359 Röbke, H. (1957) 571362 R.S. Spencer (1957) Veröff.Inst.Meeresf., 5(1):103-12 Oceanogr.Sta.List, 27:1-145 Beitrag zum Chemismus der Unterweser Onshore and oceanic hydrological unter besonderer Berücksichtigung der investigations in eastern and south-Erdalkalien und ihrer ökologischen western Australia, 1955 Bedeutung (Contribution to the chemistry of lower Weser with special Tabulated hydrographical data. consideration of metals of alkaline earth and their ecological significance) Distribution of chlorine, manganese, calcium and suspended matter in lower Wesor and discussion of their ecological significance. GLK: tl M GLK: tl MF

Roels, O.A. (1957) 571363

Rail. Cario. Congo belgo, 48(2): 423-38

La roudre de poisson frais déshydraté

com l'alimentation de l'homme

(Dehydrated fresh fish powder as a

luman food)

Ronald, K. (1957) 571366
Canad.J.Rcs.(Zool.), 35(3):437-9
The metazoan parasites of the Heterosomata of the Gulf of St. Lawrence

Echinorhynchus laurentianus sp.nov.

(Acantocephala: Echinorhynchidae) is
described from Hippoglossoides platesoides,
Hippoglossus hippoglossus, Pseudopleuronectes americanus and Scophthalmus
aquosus from the Gulf of St. Lawrence.

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FAO:hr

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Biol.Bull., Wood's Hole, 112(1):241-8 (rtokinetic testing of cyclopcan and synophtalmic fish hatchlings

Account of experiments to test cyclopean individuals for vision and with results of optokinetic drum testing.

Roland, L.D. (1957) Atomics, 8:131-5

571367

Ion exchange. Five contributions to nuclear technology

FAO:efa

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MF

Rogick, M.D. (1957) 571365 Liol.Bull.Wood's Hole, 112(1):120-31 Studies on marine Bryozoa. X. Hippadenella carschae n.sp.

A detailed description of the morphological features of <u>Hippadenella</u> carsonae, new species and to note other species which are ecologically carsoi ted with it.

Rosa, H., Jr. (1957) 571368 FAO/57/10/6958, 81 p. (mimeo) A synopsis of biological data on the species of Trichiuridei

First draft summary and review according to standard pattern of information accumulated in Species and Stocks
Thesaurus of FAO Fisheries Division
Biology Branch.

FAO:glk

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FiB:sjh

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Rouch, J. (1957) 571369
Bull.Inst.oceanogr.Monaco, (1095): 1-20
L'Antarctide américaine (The
American Antarctic)

Contains information on the boundaries and geography of the region, limits of the pack-ice barometric pressure, air temperature, and winds.

Rounsefell, G.A. (1957) 571372 Fish.Bull., U.S., 57:265-78 A method of estimating abundance of groundfish on Georges Bank

Calibration of otter-trawl fishing effort statistics by depth fished and vessel size, and calculation of sampled effective effort for each species (tabulated) by usual method.

FAO:hr

M

WAD: sjh

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Round, F.E. (1957) J.Ecol., 45:133-48 571370

Studies on bottom-living algae in some lakes of the English lake district. Part I. Some chemical features of the sediments related to algal productivities.

Comparisons between lakes of organic material and calcium, pH, and many other elements and characteristics of the muds and relation of these to type and amount of algae, and to lake classifications.

571373

Roussov, G. (1957)
J.Fish.Res.Bd Can., 14:553-72
Some considerations concerning sturgeon spawning periodicity

Discusses the periodicity observed in ago and length curves and in cross-sections of the first ray of the pectoral fin serving for the determination of age. The relation between the structural features of the ray cross-sections and physiological events is discussed.

FAO:sjh

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GLK:glk

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Round, F.E. (1957) 571371

J.Ecol., 45:343-60

Studies on bottom-living algae in some lakes of the English lake district.

Part II. The distribution of Bacillariphyceae on the sediments

Continuation from 571370, with discussion and bibliography.

Rovira, J.M.R. (1957) 571374 <u>Inform.Quim.anal.</u>, 11:99-102 Spectrophotometric determination of copper in (sea) salt

FAO: sjh

F

Rowett, H.G.Q. (1957) 571375 Rinehart and Co., Inc., New York 16, 62 p. Dissection guides. II. The dogfish

M

Royce, W.F. (1957) 571376 Biometrics, 13:546 Statistical comparisons of morphological data

Abstract of paper presented at meeting of Biometric Society and American Institute of Biological Sciences, 27-8/8/57, dealing with techniques applicable to racial studies of tunas.

SJH:sjh

M

Rühmer, K. (1957) 571377

Verlag Paul Parey, 204 p.

Die Süsswasserfische und Krebse der europäischen Gewässer (Freshwater fish and lobsters in European waters)

New (3rd) edition of Rühmer, K., 1952.

Ruhland, W. (Ed.) (1957) 571378 Handb.PflPhysiol., (9) Der Stoffwechsel der schwefel- und phosphorhaltigen Verbindungen (The metabolism of sulfur and phosphoruscontaining compounds)

Contains following chapters: Part played by S-containing compounds in metabolism; assimilation of sulfur and physiology of essential S-compounds; secondary organic sulfur-compounds of plants; the sulfur specialists among microorganisms; the cycle of sulfur in nature; accumulation of phosphoric acid; the phosphatides; the phosphoric acid esters in carbohydrate metabolism; P-containing coenzymes; etc.

:tl Ruivo, M. (1957)

571379

Bol.Pesca, (53):13 p.
Factores de conversão e indices de aproveitamento do bacalhau (Gadus callarias L.). Investigações portuguesas na área da I.C.N.A.F.; campanhas de 1954-55 (Conversion factors and indexes of net value of cod (Gadus callarias L.). Portuguese investigations in the I.C.N.A.F. area. Fishing expeditions of 1954-55)

The conversion factor 3.0 is proposed for the conversion of weights of green salt cod landed from the Portuguese fleet, to round fresh fish, as coming from the sea in the I.C.N.A.F. area.

GLK:hr

TVIT

Russell, C.R. (1957) 571380

Trans.roy.Soc.N.Z., 84(4):897-902

Some rotifers from the South Pacific

Islands and northern Australia

Lists 29 species collected from the area.

MF

FAO:glk

F

Rutstein, M.S. (1957) 571381 Trans.Amer.geophys.Un., 38(5):688-9 Flooded quarries for experimental work

Flooded quarries have some technical and economic advantages for underwater experimental work and for testing oceanographic equipment, particularly where explosions are involved or where wave action must be minimized. The quarries visited in and near New England are described.

Ryhänon, R. (1957) 571384

FiskTidskr.Finl., 64(2):42-4

Havaintoja Isojoen taimenista (Notes on the sca trout in the river Isojoki)

Growth, life history and abundance of sea trout in the river.

FAO: tl

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FAO:tl

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Ruud, J.T. and P.Øynes (1957) 571382 Norsk Hvalfangsttid., 46:59-63 Report on whale marking carried out by Norwegian catchers in the antarctic season 1955/56

Reports on the whale marking operations during the season 1955/56 and gives the results of markings done during the two previous seasons 1953/54 and 1954/55.

Ryhänen, R. (1957) 571385 FiskTidskr.Finl., 64(3):84-7 Havaintoja Isojoen taimenista (Notes on the sea trout in the river Isojoki)

Continuation from 571384.

FAO:tl

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FAO: tl

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Ryhänen, R. (1957) 571383

<u>FiskTidskr.Finl.</u>, 64(1):7-12

Havaintoja Isojoen taimenista (Notes on the sea trout in the river Isojoki)

Data on the morphology of the river basin, runoff, water chemistry and on the occurrence of different fish species and their distribution and abundance. Ryther, J.H. and 571386 C.S. Yentsch (1957) The estimation of phytoplankton production in the ocean from chlorophyll and light data

A method is described by means of which organic production beneath a unit of sea surface may be estimated from the chlorophyll content of the water, the total daily solar radiation reaching the sea surface, and the extinction coefficient of visible light in the water column. Production values calculated by this method are compared with values obtained by in situ productivity measurements.

FAO: tl

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HR: tl

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Saidova, Kh.M. (1957) 571387 C.R.Acad.Sci.U.R.S.S., 115(6):1213-6 O raspredelenii foraminifer v tolshche osadkov Okhotskogo moria (The distribution of Foraminifera in the deposits of the Okhotsk Sea) Saint-Guily, B. (1957) 571390

Bull.Inst.occanogr.Monaco, (1090): 1-8

Sur le coefficient vertical de turbulence dans les courants de vent et de ponte (On the vertical coefficient of turbulence in the wind and descent currents)

The expression of the mean coefficient of turbulence is deducted from the hypothesis of Prandtl. The numerical factor is fixed by the figure length of mixing.

FAO

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FAO:hr

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Saiki, M. et al. (1957) 571388
Bûll.Jap.Soc.sci.Fish., 22:645-50
(Studies on the radioelements in the contaminating radioactive fish. II. On skipjacks caught at the Pacific Ocean in 1956 (Part 1)). Ni En

Isotope distribution of zinc and other elements in various body organs of 2 specimens of <u>Katsuwonus polamis</u> caught 13/6/56 at 14°03'N, 157°28'E.

Saito, K. (1957) 571391
Bull.Jap.Soc.sci.Fish., 22(12):752-9
(Biochemical studies on the fish blood.
VIII. On the electrophoretic specificity of serum proteins). Ni En

Specificity of serum studied in relation to taxonomy and habitats, of <u>Cyprinus</u>, <u>Carassius</u>, <u>Chrysophrys</u>, <u>Trachurus</u>, <u>Decapterus</u>, <u>Coryphaena</u>, <u>Scomber</u>, <u>Thunnus</u>, <u>Squalus</u> and <u>Mustelus</u>.

SJH: sjh

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SJH:sjh

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Sainio, P. (1957) 571389 FiskTidskr.Finl., 64(4):107-9

"Roskakalan" tuhoaminen räjähdysaineita käyttäen (Destruction of valueless fish by explosives)

Notes on experiments made for destruction of valueless stocks of fish in small lake.

Saito, K. (1957) 571392

<u>Bull.Jap.Soc.sci.Fish.</u>, 22(12):760-7

(Biochemical studies on the fish blood.

IX. On the paper electrophoretic analysis of serum proteins). Ni En

A study of some species as previous paper.

FAO: tl

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SJH. sjh

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Saito, K. (1957)... 571393

Bull.Jap.Soc.sci.Fish., 22(12):768-72

(Biochemical studies on the fish blood.

X. On the seasonal variation of scrum protein components of cultured fish).

Ni En

Variations in Cyprinus and Scomber studied by electrophoresis and related to changes in seasonal feeding pattern.

Sakuda, H.M. (1957) 571396
Comm.Fish.Rev., 19(11):4-6
Meat content of Pavlof Bay king crabs

Gives weight-length relation of <u>Paralithodes camtschatica</u>.

SJH:sjh

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FAO:sjh

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Saito, K. (1957) 571394
Bull.Jap.Soc.sci.Fish., 22(12):773-7
(Biochemical studies on the fish blood.
XI. On the serum protein components of the mature and immature stage of the marine elasmobranchs). Ni En

Electrophoretic study of changes occurring during life of $\underline{\text{Mustelus}}$ and $\underline{\text{Dasyatis}}$.

Sala, I. (1957) 571397 Geophysica, Helsinki, 5(3) Einige Messungen der Eisfestigkeit (Some measurements on ice resistance)

Description of the method used and some data on the strength of the ice.

SJH:sjh

TMF

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MF

Saiz, F., M. Lopez-Benito 571395 and E. Anadon (1957) Invest.pesq., 8:29-87

Estudio hidrográfico de la ría de Vigo (Hydrographic study of the Vigo Loch)

Study of the dynamics of the loch based on hydrographycal and meteorological observations giving a physical and climatological description of the loch, an estimate of the water flow and exchanges with the sea and an account of the mean distribution of salinity and temperature.

Sal'nikov, N.E. (1957) 571398

Vop.Ikhtiol., 8:188-90

Zimovki sredizemnomorskogo malogo
burevestnika (Puffinus puffinus yelkonan
Acerbi) v Chernom ore i sviaz' ikh a
raspredeleniem khamsy (Hibernation
of the Mediterranean small shearwater
(Puffinus puffinus yelkonan Acerbi)
in the Black Sea and its relation to
the distribution of anchovies)

Discussion of the distribution of this bird in severe winter of 1953-54 in relation to that of Engraulisencrasicholus ponticus P. and E. e. maeoticus P., and of Trachurus trachurus L.

FAO:glk

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FAO:tl

Sanford, F.B. (1957) 571402 Sanchez y Sanchez, M. (1957) 571399 Comm.Fish.Rev., 19:1-8 J. Cons.int. Explor. Mer., 22(2):197-9 A picture study of an American whaling The culture of oysters in north-western operation Spain A pictorial study of the operation of Description of culture system and the only existing inshore whaling results obtained with limed tiles. station in the United States located on San Francisco Bay. Mili. HR:hr M GLK: sjh 571400 571403 Sano, T. (1957) Sandeman, E.J. (1957) Progr.Rep.Atl.Cst Sta., (67):26-8 J. Tokyo Univ. Fish., 43(1):75-9 Haematological studies of the culture Redfish grow slowly fishes in Japan. I. On the blood of Length frequency distribution in catches eel of Sebastes marinus, in 1953-55. Chemical and morphological analysis of blood of Anguilla japonica. FAO: sjh M FAO: sjh MF Sanford, F.B. (1957) Santos Pinto, J. dos (1957) 571401 Comm. Fish. Rev., 19:16-9 Notas Estud. Inst. Biol. marit., 15:1-13 Fish-hatchery food from anchovies caught Essai d'une échelle de maturation near Santa Barbara, California sexuelle pour le mâles de la sardine (Sardina pilchardus Walb.) basée sur A photographic report of steps in capture, transportation and processing. mental sexual maturity scale for the males of sardine (Sardina pilchardus Walb.) based on the histology of the testicules)

l'histologie des testicules (Experi-

A five stage scale is described corresponding to the physiological status of the gonads.

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FAO: hr

Santos Pinto, J. dos (1957) 571405

<u>Trab.Miss.Biol.marit.</u>, (12-16):195-230

Contribuição para o estudo dos foraminiferos dos sedimentos marinhos de Angola (Contribution to the study of Foraminifera of the marine sediments of Angola)

A systematic catalogue with information on depths and places of collection and abundance.

FAO:hr

M

Sarig, S. and G. Vardina (1957) 571406 <u>Bamidgeh</u>, 9(1):6-12 <u>Improvements in fertilizing fish ponds</u>

Discusses distribution of fertilizer in the pond and spacing the fertilizer supply in time.

WAD: tjj

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Sarojini, K.K. (1957) 571407 <u>Indian J.Fish.</u>, 4(1):160-207

Biology and fisheries of the grey mullets of Bengal

Mugil parsia and M. cunnesius.
Distribution, raciation, length-weight relation, condition, maturation and spawning, larval stages, sex-ration, fecundity, age and growth, migrations, the fishery.

GLK: glk

MF

GLK: tl

tetraspores are smaller than in latter sp. Ill.

Bull. Hokkaido reg. Fish. Res. Lab., (16):

Ecological studies on the agaroid-algae

in Hokkaido (II). On the germination of

Ni

Study made from 1954 to 1956 shows germination is of the same type as "Typus discalis mediatus" and Gracilariopsis vermiculophylla;

the tetraspores of unattached Gracilaria verrucosa (Huds.) Papf. in lake Akkeshi,

FAO: sjh

Sasaki, S. (1957)

56-8

Hokkaido).

FAO: sjh

59-62

Hokkaido).

of the spores.

Sasaki, S. (1957)

Bull. Hokkaido reg. Fish. Res. Lab., (16):

(Ecological studies on the agaroid-algae

En

in Hokkaido (I). On the germination

Ni

Ill. account of study made 1954-6 showing that germination is of type "Typus discalis mediatus". Description

of the tetraspores in <u>Gracilariopsis</u> vermiculophylla Ohmi in lake Akkeshi,

Sathpathi, N. (1957) 571410

Nature, Lond., 179(4566):913-4

A direct recording instrument for size.

Analysis of coarse granular material

Description of a modified form of Emery's sedimentation tube where the successive cumulation heights of the sedimentation column are recorded on a photographic paper wrapped over a revolving drum.

MF

571408

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571409

Sathyanesan, A.G. (1957) 571411
Nature, Lond., 180:98-9
Parasitism in relation to the pituitary
of Ophicephalus punctatus and Barbus
stigma

Ligula, Schistocephalus and other trematodes and mixosporidia in these spp. and also in Cyprinus, Carassius, Rhodeus, Leuciscus and Gasterosteus.

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FAO: tl

matter.

Saunders, G.W. (1957)

Bot.Rev., 23(6):389-409

matter and phytoplankton

Interrelations of dissolved organic

Review of the functions of dissolved

and chelation. Notes on ecological implications of dissolved organic

organic matter as nutrient, accessory growth factor, toxins and antibiotics

F

571414

Satyanarayana Rao, T.S. (1957) 571412 Sea Frontiers, 3:143-7 Science and the Indian Ocean

Brief note on the economic importance of the Indian Ocean and on past and current research there.

Saunders, J.B. (1957) 571415 Smith.misc.Coll., 134(5):16 p. Trochamminidae and certain Lituolidae (Foraminifera) from the recent brackish-water sediments of Trinidad, British West Indies

FAO:glk

GLK: sjh

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FAO

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Saubert, S. (1957) 571413 S.Afr.J.Sci., 53(13):335-9 Amino acid deamination by Nitzschia thormalis and Scenedesmus bijugatus

Pure cultures of Nitzschia thermalis and Scenedesmus bijugatus, containing amino acids as the only source of nitrogen, deaminated glycine, alanine, proline, glutaminic acid and aspartic acid, liberating up to 90 per cent of the nitrogen as free ammonia into the air.

Scattergood, L.W. and 571416
G.W. Coffin (1957)
Copcia, (2):155-6
Records of some Gulf of Maine fishes

A record of the following species:

Carcharodon charcharios, Mugil cophalus,

Sarda sarda, Hippocampus hudsonius,

Naucrates ductor, Pseudopriacanthus
altus.

FAO: tl

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HR:hr

Agricultural and the second of			
Schaefers, E.A. and H.C. Johnson (1957) Comm.Fish.Rev., 19(1):9-25 Shrimp explorations off the Washi coast, fall 1955 and spring 1956 Describes the operations, area e and bottom conditions, and the g Gives detailed tables of operatishowing location, conditions and	xplored ear used.	Schäperclaus, W. (1957) Z.Fisch., 5:161-74 Ursache und Auswirkungen der FrüpH-Werterhöhungen in Karpfenteic (Origin and effects of spring in of pH in carp ponds) The change of pH by plankton and influence on growth and mortalit carps.	chen creases its
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Schäperclaus, W. (1957) Dtsch.Fisch.Ztg, 4:79-82 Praktische Anleitung zur intraper Injektion von Chloronitrin bei zweisömmrigen Karpfen (Pract: instructions for intraperitoneal injection of chloronitrin to two- old carps) Content as per title.	ical	Schärfe, (1957) Allg.FischwirtschaftZtg., 9(21): Kleinecholote für die Küstenfisc (Small echosounders for coastal Short description of available sechosounder types and their use small vessels.	herei fishery)
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Schäperclaus, W. (1957) Verlag Paul Parey, 236 p. Grundriss der Teichwirtschaft (Compendium of pond culture)	571419	Schell, I.I. (1957) Fager presented at the Thirty-Ei Annual Meeting, Washington, D. April 29 - May 2, 1957 On the role of the oceans in the climates of the Pleistocene	<u>C.</u> ,
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Schell, I.I. (1957) Science, 125(3241):235 Theory of ice agos

Atlantic Ocean.

571423

Schiomenz, F. and

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H. Köthko, Jr. (1957) Z.Fisch., 5:175-210

Dic Fischereiverhältnisse in der Elbe vor dem Bau des Wehres in Geesthacht (The fishing conditions in the Elbe before the construction of the barrage in Geesthacht)

Description of the migrations of fish, influence of the changing water level on fish population, propagation of fish, influence of pollution and the present fisheries praxis.

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Schelske, C. (1957) 571424
Res.Stud.St.Teach.Coll., Emporia, 5(3)
An ecological study of the fishes of the
Fall and Verdigris rivers in Wilson and
Montgomery counties, Kansas, March 1954
to February 1955

Discussion on the recent climatic change,:

especially the warming up of Arctic and

Schiemer, E.W. and D.W. Pritchard (1957)

571427

Tech.Rep., Chesapoake Bay Inst., 12:16 p. The Chesapeake Bay Institute conductivity temperature indicator (CBI-CTI)

Description of the apparatus and its applicability in hydrographical investigations of estuarine and inshore waters.

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Schevill, W.E. (1957)
Sci.Mon., N.Y., 85:209-10
Follow the whale

571425

Unfavourable critical review of book by Sanderson, I.T. (1956), with same title.

Schindowski, E. and F.W. Tosch (1957)

571428

Z.Fisch., 5:247-68
Mothodisches zur Wachstur

Methodisches zur Wachstumsrückberechnung erläutert am Beispiel von Lucioperca sandra Cuv. u. Val., Perca fluviatilis L. und Salmo trutta fario L. (Methodology on the back calculation of the growth explained with the example of Lucioperca sandra Cuv. and Val., P. fluviatilis and S. trutta fario)

Construction of the scale-length correlation curves and their usefulness for backward computation of the growth.

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Schoffman, R.J. Schleicher, K.E. and 571429 A. Bradshaw (1957) J. Tenn. Acad. Sci., 32(1):3-8 Coll. Repr. Wood's Hole oceanogr. Instn, Age and rate of growth of the carp in Reelfoot Lake, Tennessee, for 1941 and A conductivity bridge for measurement of the salinity of sea water Describes a new instrument for use at sea; theory of the method; tests of precision and occurrency; field tests. I11. FAO:sjh Schmitz, H.P. (1957) 571430 Schooley, A.H. (1957) 571433 Paper presented at the Thirty-Eighth Wasserwirtsch. Wassertech., 7:64-74 Annual Meeting, Washington, D.C., Küstenschutz und wissenschaftliche Grundlagenforschung (Coastguards and · April 29 - May 2, 1957 scientific investigation) Short-fetch water wave slope probability distributions M M 571434 Schnakenbeck, W. (1957) 571431 Schuler, F. (1957) Int.hydr.Rev., 34(2):43-6 Krögers Buchdruckerei, Hamburg -Blankenese, 470 p. Profils d'echogrammes et procedé pour Die deutsche Seefischerei in Nordsee und ; les établir (Echogram profiles and Nordmeer (German sea fisheries in the procedure for making them) North Sea and in the Arctic Ocean) Discussion of the performance of echosounders, of records obtained and their interpretation, and of factors influencing performance.

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Schultz, E.A. and 571435 H.B. Simmons (1957)
Tech.Bull.Comm.Tid.Hydr.U.S.Army, (2):28p
Fresh water-salt water density currents, a major cause of siltation in estuaries

Schweigger, E. (1957) 571438

Bol.Comp.adm.Guano, 33(7):10-20

El ano 1955 - el mar durante el ano 1955

(The year 1955 - the sea during the year of 1955)

A hydrographic study encompassing analyses of temperatures and winds on the western coast of South America.

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Schuster, R. (1957) 571436

Vie et Milieu, 8(1):109

Das Kalkalgen-Trottoir and der Côte des
Albères als Lebensraum terricoler
Kleintiere (Terraces of calcareous
algae on the Côte des Albêres as
biotope for small terrestrial animals)

Supplement to Schuster, R. (1956), <u>Vie et Milieu</u>, 2(7):242-57.

R. De Voe (1957)
Biol.Bull., Wood's Hole, 112:249-53
The reversible replacement of potassium by rubidium in Ulva lactuca

Experimental work showing the rate at which rubidium ion replaces potassium, the level of such replacement, and the rate of re-accumulation of potassium. The disparity in the exchange kinetics is discussed.

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Schwartz, A. (1957) Copeia, (2):94-107

571437

Variation and natural history of Plethodon jordani clemsonae Brimley

A study of the amount and kind of variation, life history, geographic distribution, and relations of the species with its adjacent member P. j. melaventris.

Scott, G.T. et al. (1957) 571440
Science, 125(3239):160
Exchange of sodium ion in Ulva lactuca

Results of experiments with Na²⁴ on the exchange of sodium by two different temperatures and some discussion on the process of exchange.

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Scott, W.B. (1957) 571441 (1957)Searle, A.G. 571444 Copeia, (2):160-1 Malay.Nat.J., 11(3):67-76 Distributional records of fishes in An introduction to Malayan jellyfish western Canada Taxonomic account with notes on the life : Lists three species of cyprinids from history and distribution. southwestern Sasktchewan: Hybognathus hankinsoni, Chrosomus eos and Pfrille neogaca and the catostomid Pantosteus jordani. hKsnr GLK: tl M Scottish Home Department (1957) Séguin, R.L. (1957) 571445 Freshw.Salm.Fish.Res., (15):11 p. Canad.Fish Cult., 20:29-37
Management, fishing results and growth Eighth Annual Report of the Supervisory Committee for Brown Trout Research 1955of speckled trout (Salvelinus fontinalis) 1956 in Baldwin Pond, Stanstead County, Que. Covers period 11/55-10/56. Describes Describes the stocking and subsequent staff, laboratory research (under results following a poisoning of headings: fish investigations; bottom undesirable fishes. fauna studies; botanical work; chemical work) and lists publications. FiB: sjh FAO: wad F Seaman, E.A. (1957) 571443 Selleck, D.M. and C.M. Hart (1957) 571446 Progr. Fish Cult., 19(1):47-8 Calif.Fish Game, 43:309-16 Who wants a biologist? Two years of Calculating the percentage of kill private consulting service from sex and age ratios Discussion of a new field in the U.S. -Development of this theoretical method based on the author's own experience originated by G.H. Kelker (1940).

especially in the field of hydrobiology including pollution and fishery problems.

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Secane Camba, J. (1957) 571447 <u>Invest.pesq.</u>, 8:15-28 Algas superiores de las rías bajas gallegas (Higher algae of Galicia lochs)

A list of 231 seaweeds identified in the most southern locks of N.W. Spain. Previous records have been collected together with recent observations. 35 species are new records. Setlik, I. (1957) 571450

<u>Biochim.biophys.Acta</u>, 24:434-5

Periodic phenomena in photosynthesis as reflected by oxygen exchange of bluegreen algae

Demonstration that periodic phenomena are encountered in the photosynthetic exchange of exygen. They are related with light intensity and with temperature, and are observed under both aerobic and anaerobic conditions.

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Sergeant, D.E. and 571448
H.D. Fisher (1957)
J.Fish.Res.Bd Canada, 14(1):83-115
The smaller cetacea of eastern Canadian

An account is given of the known records, distribution and migrations of the smaller odontocete whales occurring in eastern Canadian waters, with measurements of specimens obtained of the rarer species. The distribution of the abundant pilot whale Globiocephala melaena (Traill) has been studied in most detail.

Seume, F.W. (1957) 571451

Anz. Schädlingsk., 30:25-7

The rearing of Daphnia magna

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Servais, F. (1957) 571449 Résult.sci.Explor.hydrobiol.Tanganika, 2(3):311 p.

Etude théorique des oscillations libres (seiches) du lac Tanganika (Theoretical study of the free oscillations in Lake Tanganyika)

Study of longitudinal and transversal seiches of L. Tanganyika and L. Geneva (including self-seiches, edge-waves and bank seiches). Most of the waves theories are reproduced in full and tested.

Shalowitz, A.L. (1957) 571452 <u>Sci.Mon., N.Y.</u>, 84:290-301 Nautical charting (1807-1957)

A historical review and description of modern methods.

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Shannon, F.A. (1957) Copeia, (2):145-6 Further comments upon the west of Scaphiopus bombifrons Critical review of original at V. Walters, Copeia, 1955, (3)	article by	Shaw, B.L. and H.I. Battle (1957) Canad.J.Res. (Zool.), 35(3):325 The gross and microscopic anatom the digestive tract of the constitution of the constitution of the digestive tract of Crassost the digestive tract of Crassost virginica is described. Anatom relationships are compared with chilensis, Ostroa odulis, and Cangulata.	omy of omy of orea coal of otrea
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Shapiro, J. (1957) Limnol.Oceanogr., 2:161-79 Chemical and biological studi		Shaw, T.I. and L.H.N. Cooper (1957) Nature, Lond., 180:250 State of iodine in sea water	571457
Study of the chemical composition optical spectral properties a biological decomposition of a substances in Lower Lishley Potenticut. The influence of concentration of these humic on plankton organisms was test	and numic ond, f different substances	Hypothesis on the state of iodi sea water as hypoiodous acid ar iodine.	
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Shavit, M. (1957) Fish.Bull., Haifa, (14):3 (Around the fisheries of Isra	571455	Shaw, W.H.R. and B. Grushkin (1957) Arch.Biochem., 67:447-52 The toxicity of metal ions to a organisms	571458
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Sheely, M.J. and 571459
R. Halley (1957)
J.accust.Scc.Amer., 29.464-9
Measurement of the attenuation of low-

frequency underwater sound

Shibuya, S. and S. Ouchi 571462.

Naturo, Lond., 180:549-50

Isolation of 2-aminoethanesulphinic
acid from a mollusc

Description of the technique of isolating and identifying the substance from tissues of Septifer (Mytilisepta) virgatus (Wiegmann).

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Shelbourne, J.E. (1957) 571460
Fish.Invest., Lond., Ser.2, 21(2):27 p.
The 1951 oyster stock in the rivers
Crouch and Roach, Essex, and the
influence of water currents and scour
on its distribution: with an account of
comparative dredging experiments

Content as per title.

Shimizu, Y. (1957) 571463
Rep.Nankai reg.Fish.Res.Lab., 6:18-24
(Bicchemical studies on the growth and maturation of fish bodies. III. Some investigations on the vitamin B12 contents of fish bodies). Ni En

Account of investigations on the relationship between growth and maturation of fish and vitamin B12 contents of important organs of Auxistapeinosoma, Seriola quinqueradiata and Germo germo.

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Shepard, F.P. (1957) 571461 Sea Frontiers, 3:171-9 Strange canyons on the sea floor

Description of canyons in different parts of the world and of recent underwater photographic and other research providing more accurate description of them and discussion of the theories of their origin and significance.

Shimizu, Y. (1957) 571464
Rop.Nankai rog.Fish.Ros.Lab., 6:25-8
(Biochomical studies on the growth and maturation of fish bodies. IV. The vitamin B2 contents in the livers and the evaries of yellowfin tuna, Noothunnus macroptorus (Temminck and Schlegel)).
Ni En

Content as per title.

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571465 Shinners, W.W. and J.A. Shirley (1957) Paper presented at the Thirty-Eighth .. Annual Meeting, Washington, D.C., April 29 - May 2, 1957 Recent developments in marine

instruments and observations

571468 Shkorbatov, G.L. (1957) Zool.Zh., 36(2):230-6 Ob eksperimental nykh obosnovaniiakh akklimatizatsii ryb (Experimental basis of fish acclimatization)

Discussion on the physiological functions affecting the acclimatization and the influence of rearing conditions on the acclimatization of grown fish.

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571466 Shirai, K., M. Saiki and S. Ohno (1957) Bull. Jap. Soc. sci. Fish., 22:651-3 (Studies on the radioelement in the contaminating radioactive fish. III. On skipjacks caught at the Pacific Ocean in 1956. (Part 2). On the presence of Cd 113m). Ni En

See 571388. Part 2 deals with cadmium (Cd113m) distribution.

Shuloikin, V.V. (1957) C.R. Aced. Sci. U.R. S.S., 115(5):915-8 Profil' vetrovykh voli i ego zapis' na pridonnykh volnografakh (Wind wave profile and its rocord by bottomwave recorders)

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Shirkova, A.P. (1957) 571467 Zool.Zh., 36(6):951-3 O biologicheskoi neodnorodnosti chudskogo

siga v sviazi s akklimatizatsiei ego v drugikh vodoemakh (On the biological heterogeneity of Coregonus lavaretus maraenoides Poljakov in connection with its introduction into other water reservoirs).

Account of investigations on the in Lake Peipus. States that supposition found in literature concerning the presence of 2 forms is not justified.

FAO: efa

Shul'man, G.E. ot al. (1957) 571470 Vop. Ikhtiol., 8:77-80 Osobennosti gazovogo obmena bychkov Azovskogo moria (Neogobius melanostomus i N. syrman) v sviazi s uslovijami obitaniia (Features of the gascous

exchange in the goby of the Azov Sea (Ncogobius molanostomus and N. syrman) in connection with the living conditions)

Discussion of experimental work on 02 biological homogeneity of whitefish shoals; consumption, the minimal O2 concentration in the water for which respiratory movement is maintained, the character , and frequency of opercular movement. . relation of these features and anacrobic conditions and HoS. 'IMO:glk

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Shumway, G. (1957) 571.71 Siller, W. (1957) Doop-Sea Res., 4(4):250-3 Öst.Fisch., 10(6/7):90-5 Beebachtungen eines Sportanglers über Carnegie Ridge bathymetry das Verhalten kranker und abnormaler Description of the bathymotry with a Fische (Observations of a sport bathymetric map of the area. angler on the behaviour of sick and abnormal fishes) Some observations on fishes infected with parasites and fishes with malformation of vertebrae. GLKstl K FAO:tl Siogrist, M. and Siltamaa, E. and M.C. Grior (1957) M. Vanhanen (1957) Geological Society of America, 768 p. Otava, <u>Holsinki 1957</u>, 184 p. Bibliography and index of geology Kalavesiä kohentamaan (Improvement exclusive of North America - Vol. 20 of fishery waters) Contains also references on submarine goology. :tl FAO Silas, E.G. (1957) 571473 Copcia, (1):61-2 The Coylonese cyprinid genus Eustira Günther considered a synenym of Danio Hamilton marine plankton of Angola)

A brief systematic analysis of characters of two nominal genera and proposition to consider Eustira a synonym of Danio.

Silva, E. de Sousa (1957) 571476 Trab.Miss.Biol.marít., (12-16):109-91 Dinoflagolados do plancton marinho de Angola (Dinoflagollates of the

A catalogue of more of 100 species with notes on morphological variations, sizes and distribution for many of them. A chart of seasonal distribution with data on salinity and temperature is givon.

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Sinclair, H.M. (1957) In "The biology of agoing", by Yapp, W.B. and G.H. Bourne (Ed.), Symp. Inst. Biol., (6): 101-13 Nutrition and ageing

Lists spp. for which it has been observed that shortage of food early in life delays maturity and prolongs life. Mentions Daphnia, Patella vulgata and trout.

571480 Sivalingam, S. and J.C. Medcof (1957) Bull.Dep.Fish., Coylon, (6):23 p. General features and productivity of the Wadge Bank trawl fishery

Description of the physical features of Wadge Bank, trawling operations, general features of catch and variations in catch per unit effort. A comparison is made of the productivity of Wadge Bank with that of other fishing areas.

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Sinclair, J. (1957) 571478 Official Rep. House of Commons Debates, Ottawa, 12 p. Fish and power

Speech made by Minister of Fisheries on February 28, 1957, reviewing the situation in Canada with regard to the International Salmon Commission and the construction of new dams.

Sjöblom, V. (1957) 571481 FiskTidskr.Finl., 64(3):77-81 Silakan katoamisesta selkämerellä the disappearance of herring from central Gulf of Bothnia)

Data on growth, age and length of herring strength of year-classes and explanation on the causes of weak yearclasses.

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Singer, B. (1957) 571479 London, Secker and Warburg, 232 p. Living silver - An impression of the British fishing industry

First novel by a young fisheries biologist, size composition of catch) containing detailed and accurate account of Scottish marine fishing industries and Data on size composition of catch with methods, and the behaviour and other nets with different mesh size on the biological characteristics of the species same fishing ground and time. taken.

Sjöblom, V. (1957) 571482 FiskTidskr.Finl., 64(5):143-5 Silakkaverkon silmäsuuruuden vaikutuksesta saaliin kokoonpanoon (The influence of mosh size of herring gill net on the

FAO: sjh

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571483 Sjöblom, V. (1957) FiskTidskr.Finl., 64(4):110-3 Turun saariston talvi- ja avovesisilakan vuoden aikaisista vaelluksista (Seasonal migrations of the winter and offshore herring in the archipelago of Turku)

Preliminary note on the size composition of catch and strongth of year classes. Notes on the seasonal migration of the stock.

Slinn, D.J. (1957) Rop.Mar.biol.Sta.Pt Erin, 69:29-33 Phosphate and oxygen in sea water off Port Erin during the years 1955 and 1956

Analyses of weekly samples, 1955 and 1956, 3 miles N. 65° W. of Port Erin, Isle of Man. Incl. temperatures.

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Slater, J.V. (1957) 571484 Biol. Bull. Wood's Hole, 112(3):390-9 Radiocobalt accumulation in Totrahymona

Experiments were designed to study the accumulation of cobalt in protozoans during growth. This study included the growth phase, the influence of deficient modium on exchange, the influence of population density on uptake per animal, and the effect of ion concentration on uptake.

Slobodkin, L.B. (1957) 571487 Proc.nat.Acad.Sci., Wash., 43:780-2 A laboratory study of the offect of removal of newborn animals from a population

A constant proportion of newborn are removed from self-regulating populations of Daphnia; population size and yield are predictable from simple equations requiring only knowledge of size of normal population and one conversion constant. When adult animals are romoved, destroying simple food dependence of population, these equations are no longer applicable.

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Slinn, D.J. (1957) 571485 Nature, Lond., 179:271-2 Erpocctyle abbreviata (Olson, (1876)) Price, 1942, a monogenetic trematode new to British waters

Small, J. (1957) 571488 Bailliòro, Tindall and Cox, 260 p. Modern aspects of pH

Three specimens recorded.

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Smod, J. (1957) Ann.biol.Copenhague, (12:10-1 Monthly anomalies of the surfa temperature in areas of the non North Atlantic in 1955 Part of "Distant Northern Seas Environment - Hydrography".	rthorn	Smith, F.G. Walton and H. Chapin (1957) West.Fish., 54(6):34-43, 64-6 There's a future for fish farmi A review of salt-water fish far with indications of its future possibilities.	į
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Smith, F.G. Walton (1957) Sca Frontiers, 3:162-70 The flying barnacle Essay on the myth associated w leucopsis.	571490 ith <u>Branta</u>	Smith, F.G. Walton and H. Chapin (1957) West.Fish., 55(1):42-7 There's a future for fish farmi A review of salt-water fish far with indications of its future possibilities.	
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Smith, F.G. Walton (1957) Sea Frontiers, 3:87-93 Sea snakes are real A popular review of knowledge occurrence and habits of the H		Smith, J.L.B. (1957) Ichthyol.Bull., (4):49-69 The fishes of the family Scorpathe western Indian Ocean - Part sub-family Scorpaenidae Description of the sub-family, species for which analytical kegiven. As far as possible photo of typical specimens are reproduct.	genera and bys are
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Smith, J.L.B. (1957) 571495

Ichthyol.Bull., (5):75-87

The fishes of the family Scorpaonidae in the western Indian Ocean - Part II. The subfamilies Pteroinae, Apistinae,

Setarchinae and Schastinae

Describes the four subfamilies and their respective genera and species for which identification keys are given.

Smith, J.L.B. (1957) 571498 Ichthyol.Bull., (6):96 p. Sharks of the genus Isurus Rafinesque, 1810

Gives a key to the genera of the family Isuridae, describes the genus <u>Isurus</u> and its species for which a key is also given.

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Smith, J.L.B. (1957) 571496
Ichthyol.Bull., (8):117-20
The labrid fishes of the subgenus Julis
Cuvier, 1814 (in Coris Lacepede, 1802)
from South and East Africa

Key to the species and their description.

Smith, J.L.B. (1957) 571499
S.Afr.J.Sci., 53(14):353-9
A preliminary survey of the Scylliogalcid dogfishes of South Africa

A preliminary survey which shows five endemic species Scyllingaleus quecketti, Mustelus natalensis, M. nigropunctatus, M. megalepterus, M. palumbes n. sp., and one from the Indo-Pacific, Mustelus manazo, to be present in South Africa.

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Smith, J.L.B. (1957) 571497

Ichthyol.Bull., (7):99-114

List of the fishes of the family Labridae in the Western Indian Ocean with new records and five new species

Key to genera; illustrations (some colored), of selected spp.; lists spp. under each genus, with synonymes and distributional notes; taxonomic description of type species; bibliography of original descriptions; list of doubtful records; index of generic and trivial names.

Smith, M.W. (1957) 571500 Canad.Fish Cult., 20:1-6 Comparative survival and growth of tagged and untagged brook trout

Describes effect of jaw tags during both summer and winter on <u>Salvelinus</u> fontinalis held in experimental ponds.

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Smith, M.W. (1957) Canad.Fish Cult., 20:39-44 Lea's hydrostatic tag on brook to Atlantic salmon smolts	571501 rout and	Smith, S.H. (1957) J.Fish.Ros.Bd Can., 14:599-604 Evolution and distribution of the corogonids	571504
Experiments with Salvelinus font and Salmo salar at Ellerslie Bro Prince Edward Island, Canada, in a comparison with results obtain jaw tags on the trout.	ok, cluding	A discussion of knowledge on the morphological and physiclogical plasticity of this group.	
FAO: wad	F	GLK:glk	F
Smith, R.T. and E. Quistorff (1957) Fish.Res.Pap.Wash.Dep.Fish., 2(1 Survival capacity of spermatozoa the chinook salmon and steelhead Viability of stored sperm of Onc chus tshawytscha and Salmo gaird gairdnorii.	of trout orhyn-	Smith, S.H. (1957) Fish.Bull., U.S., (109):87-138 Life history of lake herring of Bay, Lake Michigan Account of investigations of the of Leucichthys artedi (Le Sueur special reference to age composi growth length-weight relation; reproduction and sex composition distribution and movements.	e biology), with ition;
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Smith, S.B. (1957) Canad.Fish Cult., 20:7-12 Survival and growth of wild and rainbow trout (Salmo gairdnerii) Corbett Lake, British Columbia Describes a marking experiment u wild stock (reared in natural po and a stock with complete hatche conditioning.	in sing nds)	Smith, W.C. (1957) Rep.Mar.biol.Sta.Pt Erin., 69:27 Gonad condition, age and size of herrings, 1945-53, and comperiso earlier years Records of Clupea harengus sample for data 1945-53 (for earlier years see same author (1948); for late years Bowers, A.B. (1955, 1956,	Manx on with les, pars
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Smogorzhevskii, L.A. (1957) 571507

Zool.Zh., 36(6):953-4

Materialy k voprosu o znachenii
chornozoboi gagary (Gavia arctica) v
rybnom khoziaistve (Contribution to
the role of Gavia arctica L. in
fisheries management)

Analysis of the stomach and oesophagus contents of 67 birds taken in the Chernigov, Kiev and Cherkassk districts of the UkrSSR in September-November 1951-1955.

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Smyly, W.J.P. (1957) 571508 Hydrobiologia, 11(1):59-72 Distribution and seasonal abundance of Entomostraca in moorland ponds near Windormere

Mothods and results of a study, 1951-53, made in open waters and weed beds.

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Snodgrass, F. and W.H. Munk (1957)

Snieszko, S.F. (1957)

salmonid fishes

by the author.

Progr. Fish Cult., 19(2):81-4

Use of antibiotics in the diet of

A summary in tabular form of the

effects of enriching the diet of fishes

Wolfgeng (1956), "Über die Perspektiven

with antibiotics based upon: Müller,

der Antibiotika-Verfütterung in der

Teichwirtschaft." Deutsche Fischerei-

Zeitung, 3(4):110-5; and a compilation

Paper presented at the Thirty-Eighth Annual Mosting, Washington, D.C., April 29 - May 2, 1957

Off-shore recording of ocean waves in the band 1 to 100 cycles per kilosecond

FAO: wad

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Smyly, W.J.P. (1957) 571509 Proc.zool.Soc.Lond., 128(3):431-53 The life-history of the bullhead or miller's thumb (Cottus go io L.)

Distribution; sampling methods; sex identification; behaviour and habits; reproduction; growth in length and weight; feeding and food; parasites and predators; in R. Brathay and L. Windermere, England.

Society of Chemical Industry. 571512
London (1957)

New York, Macmillan, 157 p.

Disposal of industrial waste materials.

Papers read at the Conference at

Sheffield University, 17th-19th April,

1956 with the discussions that followed

FiB: sjl

F

MF

Comm. Fish. Rev., 19(12):47-8

West coast albacore fishermen adapt unique method for relaying information by ship's radio

Sorokin, C. (1957) 571516

Physiol.Plant., 10(4):659-66

Changes in photosynthetic activity in the course of cell development in Chlorella

Cells of the high-temperature strain of <u>C</u>. pyronoidosa were synchronized in their development by intermittent light: dark illumination. The rate of photosynthesis, as it changes in the course of cell development, was studied with the manemetric technique and compared with the rate of the increase in cell volume, dry weight, chlorophyll content, and respiratory activity. FAO:tl

FAO

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Soloim, P. (1957) 571514

Konkylion, 2(1):9-13

Klimachdringen og fiskot (Climatic changes and fisheries)

Popular description of the influence of climatic changes in North Atlantic on fisheries, with special reference to the cod fishery in West Greenland waters.

Soulo, F.M. and 571517
J.E. Murray (1957)
Bull.U.S.Cst Guard, (41):59-114
Physical occanography of the Grand Banks
and the Labrador Sea in 1955

Report 1955 cruises of USCGC EVERGREEN - Station lists and tabulated data-tomporature, salinity, phosphorus; charts and profile.

FAO: tl

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:sjh

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Solomon, M.E. (1957) 571515

Ann.Rev.Entomol., 2:121-42

Dynamics of insect populations

A general review which considers processes common to all animal populations, with particular reference to the density-dependence of controlling factors.

Southgate, B.A. (1957) 571518 <u>Challenger Soc.</u>, 3(9):31 The Thames estuary and its pollution – I. An outline of the problem

Abstr. of paper read at Joint Meeting of the Water Pollution Research Laboratory, Stevenage; and Zoological Society of London, Regent's Park, London. 24th and 25th January, 1957. Notes on investigations to predict quantitative effects of making alterations in some of the factors influencing pollution.

GLK: sjh

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SJH:efa

MF.

Southward, E.C. (1957) 571519 J.Mar.biol.Ass.U.K., 36(1):49-75 The distribution of polychaota in offshore deposits in the Irish Sea

It was found that, although some species were widely distributed, each bottom deposit had a typical fauna, and that where the deposits graded into one another the polychaete fauna was also mixed. The distribution of each species appears to depend mainly on its mode of life and feeding habits.

HR:hr

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SJH:sjh

year.

Spear, H.S. and

J.B. Glude (1957)

Fish.Bull., U.S., 57(114):279-92

Effects of environment and heredity on growth of the soft clam (Mya arenevia

Reports results of transplantation

of environment in growth of clams

initially about 2-3 cm long for one

experiments between various parts of Sagadahoc Bay, Georgetown Island,

Maine, U.S.A., showing dominant effect

M

571522

Sparks, A.K. (1957) 571520

<u>Bull.Mar.Sci.Gulf Caribb.</u>, 7(3):255-65

<u>Some digenetic trematodes of marine</u>

rishes of the Bahama Islands

Twenty-three species of trematodes were identified, 16 new host records were established, and a new record for the Atlantic Ocean of a species described from the Pacific Coast of California was cited.

Spencer, C.P. (1957) 571523

Challenger Soc., 3(9):21

The oxidation of ammonia in the sea

Abstr. of paper read at Joint Meeting of the University College of North Wales, Bangor 2nd, 3rd and 4th July, 1956. Reports comparison of pattern of ammonia exidation in open ocean and inshore water masses.

FAO:glk

commercial shrimp

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SJH: of a

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Sparks, A.K. and 571521 J.G. Mackin (1957) Tex.J.Sci., 9:475-6 A larval trypanorhynchid cestode from

A note on occurrence of <u>Eutetrarhynchus</u> in <u>Peneus setiferus</u> (L.) from Louisiana waters, 1957, with comment on previous observations of cestodes of this family in marine animals.

Spencer, C.P. (1957) 571524 J.gon.Microbiol. (Symp.on plankton), 16:282-5

Utilisation of trace elements by marine unicellular algae

Description of some recent results obtained from the investigation of ethylenediamine tetra-acetic acid on the growth of marine unicellular algae and possible implications of the results on various aspects of trace elements utilization.

FAO: sjh

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FiB: tl

Sponcor, R.S. (Comp.) (1957) 571525 Oceanogr.Sta.List, 29:93 p. Bestuarine hydrological investigations in eastern and south-western Australia, 1955 Tabulated oceanographic data.		Springer, S. (1957) Ecclegy, 38:166-71 Some observations on the behavious schools of fishes in the Gulf of and adjacent waters	
		Describes the circumstances and characteristics of schooling bet of Jenkinsia lamproteenia Goose, Opisthenema glinum (Le Sueur), Decaptorus punctatus (Agassiz), Saranchovia (C. and V.), Mugil cephal Rhincoden typus, Thunnus atlanti (Lessen.), and Stenella plagiode	rdinolla lus Linn, leus
GLK: tl	NF ;	FAO:glk	M .
Sponcer, R.S. (Comp.) (1957) Oceanogr.Sta.List, 32:170 p. Estuarine hydrological investigatin castern and south-western Aust 1956		Springer, S. and J.R. Thempson (1957) Copcia, (2):160 Night sharks, Hypoprion, from the Mexico and the Straits of Florid	571529 no Gulf of
Tabulated data: Cl ^o /oo, O ₂ , pH, PO ₄ -P and NO ₃ -N.		Reports and describes Hypoprion (Poey), the first of the genus as sp. recorded.	signatus and
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GLK:tl	M	HR:efa	M
Spenser, E. (1957) Research, Lond., 10(3):79 River pollution Editorial comment on "The use of waste in agriculture" - Report of Natural Resources (Technical) Con London: H.M.S.O., 1954.	the	Spurway, H. (1957) Nature, Lond., 180:1248-51 Hermaphroditism with self-fertil and the monthly extrusion of unfeggs, in the viviparous fish Lereticulatus Account of observations on two in phenomena: 1) functional hermapheresulting in self-fertilization and 18 of her descendants; 2) exof groups of unfertilized oocyte surrounding water.	ndependent roditism in a fish trusions
FAO: sjh	F	GLK :efa	F

Gaures, H.J. (1957) 571531 Canad.J.Res. (Zool.), 35(3):463-94 1.capod Crustacea of the CALANUS expeditions in Ungava Bay, 1947 to 1950

Systematics of each species is treated under occurrence in Ungava Bay, world distribution and taxonomy. Maturities with respect to size when first mature, egg size, and time of hatching and spawning are discussed.

Starr, T.J. and M.E. Jones (1957) 571534 <u>Limnol.Oceanogr.</u>, 2(1):33-6 The effect of copper on the growth of bacteria isolated from marine environments

Reports the effect of increasing coppor concentrations on the growth of 145 different cultures of marine bacteria and compares this with effect of this substance on Gymnodinium brevis with a view to possible use of this substance in controlling G. brevis.

FAO:lir

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HR:glk

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Squires, H.J. (1957) 571532

Progr.Rop.Atl.Cst Sta., (67):31-3

Cod oggs and herring larvae in late

September an indication of fall spawning in the Gulf of St. Lawrence

Report of hydrographic cruise of CNAV SACKVILLE, 18/9 - 18/10/1955.

Stauffer, R.C. (1957) 571535 Quart.Rev.Biol., 32(2):138-44 Haeckel, Darwin and ecology

Includes account of controversing between E. Hackel and V. Henson concerning marine plankton sampling and distribution.

FAO:sjh

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FAO: sjh

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Srconivasan, A. (1957) 571533 <u>Curr.Sci.</u>, 26(12):392-3 <u>Nitrate-reducing</u> bacteria from marine environment

Notes on the abundance of nitratereducing species among other marine bacteria. Stazione Zoologica di 571536
Napoli (1957)
Fauna e Flora del Gelfo di Napoli, 580 p.
Uova, larvo e stadi giovanili di
teleostei (Eggs, larvae and juvenile
stages of teleosteans)

FAO:tl

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Steele, J.H. (1957) 571537 J.Cons.int.Explor.Mer., 22(2):152-62 The role of lateral eddy diffusion in the northern North Sea

Interpretation of hydrography with reference to seasonal events, the Baltic outflow and turbulence spectrum.

Steinitz, H. and 571540

A. Ben-Tuvia (1957)

Bull.Res.Coun.Israel, 6B(3-4):176-88

The hybrid of Barbus longiceps C.V. and Varicorhinus demscinus C.V. (Cyprinidae, Teleostei)

Comparison of typical specimens of those spp. with the intermediate form found in Israeli lakes, verified by artificial cross fertilization.

FiB: sjh

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FAO:sjh

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Steemann Nielsen, E. (1957) 571538

Physiol.Plant., 10(5):1009-20

The chlorophyll content and the light utilization in communities of plankton algae and terrestrial higher plants

Theoretical comparison of the maximum rates of production per surface area in the aquatic and terrestrial plant communities, with emphasis on the questions of light utilization.

Stephens, G.C. (1957) 571541
Physiol.Zoöl., 30(1):55-69
Influence of temperature fluctuations
on the diurnal melanophore rhythm of
the fiddler crab Uca

Results of experiments showing that the timing of the diurnal melanophore rhythm of <u>U. pugnax</u> can be shifted with respect to the solar day-night cycle by exposing animals maintained in darkness to low temperatures; the conditions required in this temperature change with respect to level and duration are reported.

FAO: tl

MF

FAO:glk

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Stefan, G. et al. (1957) 571539

Bul.Inst.Cerc.piscic.Roman., 16(2):46-52

Reproducerea artificiala a cleanului si

mrenei la Manastur-Cluj (Artificial

propagation of Leuciscus cephalus and

Barbus barbus at Manastur-Cluj).

Ru Fr

At a time in captivity the sexual products deteriorate. Injections of hypophysial extract are only effective in the Leuciscus. Incubation of eggs; supplementary feeding; infestation with Saprolegnia.

FAO:sjh

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Stephenson, W. and 571542
E.M. Grant (1957)
Ichthyol.Notes, 1:73-116
Experiments upon impounded callop or yellowbelly (Plectroplites ambiguus (Richardson) at Somerset Dam

Description of the ponds and the methods used in an attempt to determine its suitability for stocking or for pond culture. Analysis of appetite preferences; determination of saturation feeding and analysis of the factors affecting it.

GLK:glk

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Stern, T. (1957) 571543
Fish.News, (2302):6
Polluted mussels simply cleansed

Gives brief descripton of a simple system of mussel purification in tanks.

Stiles, W. (1957) 571546 Sci.Progr., 45:297-307 Recent advances in science: plant physiology

FAO:efa

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MF

Stickel, L.F. (1957) 571544

Wash., U.S.Govt Print.Off., 321 p.

Wildlife abstracts, 1952-55. A

bibliography and index of the abstracts
of Wildlife review, numbers 67-83

Stokke, K. (1957) 571547

Nytt Mag. Bot., 5:101-11

The red alga Gracilaria verrucosa in

Norway

Distribution, ecology, observations on morphology and reproduction.

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FAO:tl

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Stickney, A.P. and 571545 L.D. Stringer (1957) Ecology, 38:111-22 A study of the invertebrate bottom fauna of Greenwich Bay, Rhode Island

Describes the area. Recognizes and describes principal communities and discusses their characteristics with respect to the distribution and production of Venus.

Stommel, H. (1957) 571548
Bull.Mar.Sci.Gulf Caribb., 7(3):252-4
Florida Straits transports, 1952-1956

Table of 24-hour averages of Florida Straits transports in millions of cubic metres per second, measured over four years by continuous measurements (over week-ends) of the potential difference between Key West and Havana.

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PAO:glk

Stonmel, H. (1957) 571349

Deep-Sea Res., 4(3):149-84

A survey of ocean current theory

Description and comparison of different theories. Isolation of the basic physical ideas in the theories and their diagrammatic presentation.

Strahan, A. (1957) 571552
Copcia, (2):146-7
The effect of salinity on the survival
of larvae of Bufo melanostictus

Describes experiment on the extent of ability of sp. normally found in fresh water to withstand brackish water.

GLK:tl

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HR:efa

arrangements)

Strakhov, V.A. (1957)

Fish.Ind., Moscow, 33(1):87-92

rybozagraditel'nykh ustroistvakh

Ispol'zovanie elektricheskikh polei v

(Using electric fields in fish separation

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571553

Stommel, H. and 571550
G. Veronis (1957)
Tellus, 9(3):401-7
Steady convective motion in a horizontal layer of fluid heated uniformly from above and cooled nonuniformly from below

A gravitationally stable fluid layer is heated nonuniformly (sinusoidally) at the bottom (or top) and a thermal convection regime is established. Examples are worked out for cases without rotation, with uniform rotation, and with nonuniform rotation (betaplane).

FAO:tl

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Storr, J.F. (1957) 57155 <u>Educ.Ser.Fla Bd Conserv.</u>, (9):29 p. The sponge industry of Florida

Revision of original 1949 publication under same title. Summary of biology of porifera; fishing method; commercial production and value; history of industry effect of oceanographic factors; potential cultivation; marketing problems; research programmes.

571551 Strasburg, D.W. (1957) 571554
p. Copeia, (1):58-60
Notes on the respiration of small Remora
remora

Account of observation on the respiratory behaviour of the sp.

TAO:sjh

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Strasburg, D.W. and 57:558 R.W. Hiatt (1957) Nature, Lond., 180:982-3 Pacif.Sci., 11(1):133-4 A lake with trapped sea-water? Sexual dimorphism in the labrid fish genus Gomphosus Describes studies in Lake Tokke, Norway, leading to the theory that it contains Description of specimens and discussion sea water trapped there six thousand of the taxonomic significance of the years ago. finding. GLK:glk 11 GLK: wad MF Stratton, G.B. (Ed.) (1957) 571556 Stuart, L.C. (1957) 571559 Zoo Life, 91 Copeia, (2):89-94 The zoological record Herpetofaunal dispersal routes through northern Central America A preliminary discussion of dispersal routes of amphybians and reptiles. MF HR:hr F 571557 Strelkovsky, V.I. (1957) Sunu, P. and F. Vives (1957) 571560 C.R. Acad. Sci. U.R. S.S., 115(2):403-6 Invest.pesq., 8:121-6 O formirovanii svinui mezhdu gioidnoi i Sobre la presencia de Gastrosaccus cheliustnoi dugani v ontogeneze osetra sanctus (Van Beneden) en la desemboca-(Acipenser güldenstädtii) dura del río Ebro (On the presence formation of a link between the hyoid and of Gastrosaccus sanctus (Van Beneden) the mandibular arches in the ontogeny of in the estuary of the river Ebro) Acipenser güldenstädtii) Report of the occurrence with notes and illustrations on the morphology of the species. FAO FAO:hr

Sundstrom, G.T. (1957) 571564 Sugama, K. (1957) 5/1501 Circ.U.S.Fish Wildl.Serv., (48):48 p. Bull.Hokkaido reg.Fish.Res.Lab., (16): Commercial fishing vessels and gear Analysis of population of the saury (Cololabis saira Brevoort) on the basis Gives for each vessel and gear a specification, line drawing, map of main of character of the otolith - I. area of fishing operation, and various information such as speed, number in Two types of otolith zonation are crew, lengths of trips, and convertibility distinguished and related to position of vessel to other types of gear. of capture and time of hatching. MF FAO: sjh 11 FAO: sjh 571562 Sundius, S. (1957) Sutcliffe, W.H. (1957) 571565 Svensk FiskTidskr., 66(10):155-9 Paper presented at the Inter-Island Marine Biological Conference, March 31-Atomkraften och vara vattendrag (Nuclear power and our rivers) April 6, 1957 Bermuda biological station Review of the development of the nuclear A list of the laboratories in the islands power and the necessity to reserve some rivers in natural conditions. of the Caribbean with information on their physical facilities, staff, etc. Abstract in "Report by the Institute of Marine Biology, University of Puerto Rico". FAO: tl F HR:hr M Sundnes, G. (1957) Sutcliffe, W.H., Jr. (1957) 571566 J.Cons.int.Explor.Mer., 22(2):191-5 Limnol.Oceanogr., 2:295-6 On the transport of live cod and coalfish An improved method for the determination of preserved plankton volumes Well-boat experiments with Gadus callarias L. and Gadus virens L. show the Description of a colorimetric method importance of oxygen supply just after for determination of a quantity of loading. collected plankton.

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HR: tl

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GLK: sjh

Sutherland, K.L. (1957)
Research, Lond., 10:198-204
Economic methods of controlling
evaporation of water

Review of the work on monomolecular films for reducing evaporation from water surfaces with special reference to the use of hexadecanol which is

nontoxic to animals and which does not affect oxygen transfer in water adversely.

Sutton, G.H., H. Berckhemer 571570 and J.E. Nafe (1957)

Paper presented at the Thirty-Eighth

Paper presented at the Thirty-Eighth Annual Recting, Washington, D.C., April 29 - May 2, 1957

Physical aspects of deep-sea sediments

FA0:glk

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Sutherland, N.S. (1957) 571568

Nature, Lond., 179:1310

Shape discrimination in the octopus

Part of a debate on neurophysiological mechanisms.

Suzuki, A. and T. Morio (1957) 571571
Rep.Nankai reg.Fish.Res.Lab., 6:29-40
(Biochemical studies on the growth and maturation of fish bodies. V. The relation between the maturation of "Marusoda", Auxis tapeinosoma (Bleeker) and the contents of iron, copper and zinc in their body). Ni En

Content as per title.

GLK:glk

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FAO :efa

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Sutherland, N.S. (1957) 571569

<u>Nature, Lond.</u>, 179:11-3

<u>Visual discrimination of orientation and shape by the octopus</u>

Account of equarium experiments using Octopus vulgaris, by conditioned reflex method.

Suzuki, A. and T. Morio (1957) 571572

Rop.Nankai reg.Fish.Res.Lab., 6:41-6

(Biochemical studies on the growth and maturation of fish bodies. VI. The contents of iron, copper and zinc of the ovaries of yellowfin tuna).

Ni En

Content as per title.

GLK: sjh

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FAO:efa

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Svätokrizna, G. and 571573 571576 Swallow, J.C. and R. Jacko (1957)L.V. Worthington (1957) Biológia, 12(11):828-42 Nature, Lond., 179:1183-4 Saprobiologicky vyskum Malého Dunaja Measurements of Jeep ourrents in the (Saprobiological investigation of the western North Atlantic Little Danube) Data on doop currents obtained by Investigations of the degree of measurements with neutrally buoyant pollution in the river using Kolkwich floats. saproby-system of the animals and plants as indicator. FAO:tl GLK: tl M Swain, A. (1957) 571574 Swan, M.A. (1957) 571577 Paper presented at the Symmosium of the Scot.Net., 69:67-70 British Association mosting in Dublin, Specimens of char from Shetland and the Sect.D (Zool.), 10/9/57 Faroe Factors affecting the downstream migration of salmon and sea trout The Shetland Salvelinus gracillimus in the Loch of Girlsta was believed extinct, but is thriving. Its title to specific rank is questionable. :jae MF Swallow, J.C. (1957) 571575 Swedmark, B. and 571578 Dcep-Sea Res., 4:93-104 G. Tessier (1957) Some further deep current neasurements C.R. Acad. Sci., Paris, 244:501-4 using neutrally-buoyant floats Organisation and development of Halammohydra (Hydrozoa)). Nine more observations have been made and currents ranging from 22 to 0.8 cm/sec have been measured, at dopths between 340 and 2,900 metros.

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· FAO

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FAO:glk

Sweeney, T.R. and T.R. Price (1957) Rep.NRL Progr., April 1957, 59 p. Weathering of creosoto related to marine borer control

The relationship between chemical composition of creosote and its ability to protect wood against marine borers has been studied by a method which accelerates the weathering of the treated wood.

571582 Sysoev, N.N. and V.G. Volkov (1957) Trud. Inst. Okeanol., 24:173 Manual of the techniques of electromagnetic measurement of sea currents velocities under way).

FAO: tl

future

Sykes, J.E. (1957)

M

Szabo, T. (1957) 571583 C.R.Acad.Sci., Paris, 244:1265-7 Un centre bulbaire particulier chez deux

types différents de poissons électriques de la famille des mormyrides bulbous centre in two different types of electric fishes of the family Mormyridae)

Ill. note on brain anatomy of Gymnarchus niloticus and Gnathonemus senegalensis elongatus.

Commission with information relating to rehabilitation of Alosa sapidissima runs of the Atlantic coast. Probable effects of pollution and dam construction

Atlantic States Marine Fisheries

Part of a study begun in 1950 to supply

Res.Rep.U.S.Fish Wildl.Serv., (46):25 p.

Past and present Delaware River shad fishery and considerations for its

on the declining fishery.

FAO: sjh

MF

571581

FAO:sjh

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Sykes, J.H.M. (1957) Discovery, 18(2):51-5 Energy from the sea

Discussion on the increasing demands for power and the future possibilities to meet this demend. Description of French plans and work on tidal power.

Tabata, S. (1957) 571584 Trans. Amer. geophys. Un., 38:191-7 Classification of daily sea-water data

A method is presented for classifying daily observations of sea-water temperature and salinity at five light stations along the coast of British Columbia. Examples of the use of this classification are also shown.

FAO: tl

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TL: tl

Tabata, S. and G.L. Pickard (1957) 571585 J.Fish.Res.Bd Can., 14:487-520 The physical oceanography of Bute Inlet, British Columbia

Distribution of salinity, temperature and oxygen has been examined on the basis of 12 oceanographic surveys from August 1950 to July 1953. Salinity structures of the shallow waters during the various seasons are classified. The role of insolation and of cold runoff water as factors influencing the fluctuation in sea temperature is discussed.

GLK:glk

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Taguchi, K. (1957) 571586

Bull.Jap.Soc.sci.Fish., 22(9):511-4

(The seasonal variation of the good fishing area of salmon and the movements of water masses in the waters of western North Pacific - I. Distribution and movement of water masses). Ni En

Results of exploratory fishing and hydrological observations by 14 research vessels of Nichiro Fisheries Co. corroborate previous reports and indicate some changes.

SJH: tjj

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Taguchi, K. (1957) 571587

Bull.Jap.Soc.sci.Fish., 22(9):515-21

(The seasonal variation of the good fishing area of salmon and the movements of the water masses in the waters of western North Pacific - II. The distribution and migration of salmon population in offshore waters).

Ni
En

Analyses catches of 339 gillnet-boats during the 1955 season.

SJH: tjj

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FAO:sjh

Taguchi, K. (1957) 571588

Bull.Jap.Soc.sci.Fish., 22:609-17

(The seasonal variation of the good fishing area of salmon and the movements of water masses in the waters of western North Pacific - III.

Relation between the distribution of salmon population and oceanographical condition mainly in the southern waters of 48°N. Lat.).

Ni En

Describes occanographic studies made since 1934, and results of exploratory fishing by ten research vessels in 1956; relation of distribution of salmons of Asian origin to Oyashio and Kuroshio currents.

SJH: sjh

Tait, J.B. (1957) 571589

Proc.roy.Soc.Edinb., 64(18):239-89

Recent oceanographical investigations in the Faroe-Shotland Channel

The research reveals very large scale seasonal and long-term variations in the north-eastward volume-transport of oceanic water, suggests the existence on occasions of what appear to be horizontal tortional currents within the oceanic water-mass, and demonstrates (a) the intrusion of Gulf of Gibraltar (extra-Mediterranean) water into this mass over a period of years, (b) the formation of heavy oceanic water and (c) of a sub-oceanic current.
FiB:glk

Takagi, K. (1957) 571590

J.Tokyo Univ.Fish., 43(1):97-126

Descriptions of some new gobioid fishes of Japan, with a proposition on the sensory line system as a taxonomic character

Ill. descriptions of n. spp. Amblyelcotis japonicus, Ctenogobius dotui, Callogobius shunkan, Stignatogobius minutus, Paleatogobius uchidai (gen. nov.) and Chaenogobius scrobiculatus.

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Tal, S. (1957) 571591 Bamidgeh, 9(1):3-6 Actual problems in carp culture

Fish food, drop in yield and storage and other marketing problems are discussed.

Talling, J.F. (1957) 571594 Hydrobiologia, 11(1):73-89 The longitudinal succession of water characteristics in the White Nile

Describes the physical and chemical successional changes, including some scasonal differences, their causes and their effect on the biota.

WAD: tjj

FAO: wad

Tal, S. (1957) 571592 Bamidgeh, 9:21-6

Reasons for the pond yield decrease during 1956 and means of preventing re-occurrence

An analysis of the distribution of and reasons for decreases in total yield as compared with previous years, with suggestions for future improvements.

Talling, J.F. (1957) 571595 Limnol.Oceanogr., 2:213-21 Some observations on the stratification of Lake Victoria

Studies of this tropical African lake in 1956 are described and compared with provious ones with reference to temperature, oxygen, the vertical distribution of planktonic algae and its relation to the photosynthetic zone.

FAO: sjh

F.

HR: wad

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Talbot, F.F. and 571593 B.S. Nowell (1957) E.Afr.agric.J., 22(3):118-21 A preliminary note on the breeding and growth of Tilapia in marine fish ponds on Zanzibar Island

Initial experiment in the stocking of marine fish ponds, operated by the East African Marine Fisheries Research Organization, with a species of wild Tilapia closely related to T. mossambica by examples relating to the growth of and T. pangani. Description of the experiment. This species of T. shows remarkable adaptation to environment. There has been direct competition with Chance chanos for food.

Talling, J.F. (1957)
New Phytol., 55(2):133-49

571596

The phytoplankton population as a compound photosynthetic system

Influence of various environmental factors on the photosynthesis is described. A mathematical model, describing the general case of integral photosynthesis in the water column, is attempted. Its application to ecological situations is illustrated Asterionalla in Lake Windermere.

FAO:tl

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Talling, J.F. (1957) 571597 · Tamiya, H. New Phytol., 56:29-50 Photosynthetic characteristics of some . Mass culture of algae freshwater plankton diatoms in relation to underwater radiation

I. Of natural and cultured populations of diatom Astorionella formosa principally from English lakes. II. Effocts of temporature and light intensity. III. Of other planktonic diatoms - Fragilaria crctonensis (cultured population) and Mclosira italica subsp. subarctica (natural population).

FiB tl

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(1957)

Annu. Rev. Pl. Physiol., 8:309-34

Talling, J.F. (1957) 571598 Physiol.Plant., 10(1):215-23 The growth of two plankton diatoms in mixed cultures

The growth of two freshwater plankton diatoms, Asterionella formosa and Fragilaria crotonensis, is described from mixed cultures and in media containing culture filtrates.

571601 Tamura, T. (1957) Bull.Jap.Soc.sci.Fish., 22(9):536-57 A study of visual perception in fish, especially on resolving power and accommodation

Discusses power of lens, dioptric accommodation and retinal capacity in 27 species, comparing their visual fields in terms of binocular angle, visual axis and topographical differences in cone density.

FAO: tl

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571600

Tambs-Lyche, H. (1957) 571599 Vop. Ikhtiol., 8:19-24 Razvitie morskikh rybolovnykh issledovanii v Norvegii (The development of Marine Fisheries Research in Norway)

Brief general review of the history of Norwegian fisheries research with reference to the work of G.O. Sars, H. Hansen, J. Hjort and others.

571602 Tamura, T., G. Mitarai and Y. Sugita (1957) Bull.Jap.Soc.sci.Fish., 23:86-91
The lowest intensity of illumination to produce the maximum cone potential in the fish retina and its ecological meaning

Comparative experimental study of Sparus aries, Cyprinus carpio and Lateclabrax japonicus.

FAO:glk

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SJH: sjh

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Tanaka, K. (1957) 571603 Taylor, G.N., L.S. Cole 571606 Bull.Jap.Soc.sci.Fish., 23(4):202-5 and W.F. Sigler (1957) Observations on the distribution of J.Wildlifo Mgmt, 21:201-13 Conchocelis-phase of Porphyra tenera Galvanotaxic response of fish to Kjellman in the oyster-shell pulsating direct current Tank experiments with shells of Ostroa Summary of an investigation of advantage denselamellosa. and disadvantage of some power forms, especially that of pulsed direct current, in capturing live fish especially Salmo gairdneri but also Cyprinus, Ictalurus, Coregonus and Catostomus. SJH: sjh FAO:sjh Taniguchi, T. (1957) 571604 Taylor, G.T. and 571607 Bull.Jap.Soc.sci.Fish., 22(12):727-9 R.J. LoBrasseur (1957) (On the resistance of various cod ends Progr.Rep.Pacif.Cst Stas, (109):9-11 fixed in a stream - IV). Ni· Distribution, agc and food of steelhead trout Salmo gairdneri caught in The hydrodynamic resistance of pyramid the northeast Pacific Ocean, 1956 type cod ends with different total areas. of webbing was measured experimentally. Length and age distributions; stomach The results were compared with contents. theoretical values. SJH:sjh MF GLK: sjh MFTanonaka, G.K. (1957) 571605 Taylor, W.R. (1957) 571608 Copeia, (1):53-4 Sci. Ser. Univ. Michigan Stud., 13:509 p. The occurrence of the squaretail, Tetra- Marine algae of the northeastern coast gonurus cuviari, on the high-seas south of North America of the Aleutian Islands

Reports first record of this sp. from high seas of North Pacific.

HR:efa

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Tchernia, P. (1957) Bull. Com. centr. Océanogr., 9(10): 545-50 Sur l'origine des caux salées profondes du nord-ouest de l'Océan Indien the origin of the deep salt waters in the north-west of the Indian Ocean)

Examination of past theories on this question in the light of results of work done in 1955/56 and of an examination of the results of the JOHN MURRAY expedition. The influence of the waters of the Red Sea, the Persian Gulf and the Arabian Sea is discussed.

FAO:glk

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distribution.

Templeman, W. (1957)

Progr.Rep.Atl.Cst Stas, (67):14-8

7/1956 to study Sebastes marinus distribution by area and depth. Catch

per unit effort, length and weight

Redfish exploration north of Flemish Cap

Reports cruise of INVESTIGATOR II, 12-17/

M

Tchernigovtzeff, C. (1957) 571610 C.R.Acad.Sci., Paris, 244:1267-9 Observations sur l'évolution du bourgeon de régénération du second péréiopode choz Leander serratus (Pennant) (Observations on the development of the regenerative bud of the second periopod in Leander serratus (Pennant))

Describes amputation experiment on specimens reared in laboratory.

571613 Tompleman, W. and E.J. Sandeman (1957) Progr.Rep.Atl.Cst Stas, (66):20-3 Two variotics of redfish in the Newfoundland area.

Ill, description of distinction between Sebastes m. marinus and S. marinus montella.

FAO:sjh

GLK: sjh

Togelberg, H.C. and 571611 J.M. Smith (1957)Fish.Res.Pap.Wash.Dep.Fish., 2(1):25-34 Observations on the distribution and biology of the pink shrimp (Pandalus jordani) off the Washington coast

Exploratory trawling by JOHN N. COBB, October-November 1955 and March-April 1956, giving size composition, diurnal variations in catches, maturity, sexratios.

571614

Terry, R.D. and R.E. Stevenson (1957) Bull.gcol.Soc.Amer., 68:125-8 Microrelicf of the Santa Monica Shelf. California

FAO: sjh

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Tesch, F.W. and W. Steffens (1957) 571615 : Tezel, R. (1957) 571618 Balık Balıkçılık, 5(6):23-7 Dtsch.FischZtg. (4):105-10 Ein Grossgarnzug der Plattenseefischer Eski profesyonel balıkçılara dair (Pulling of big nets by the fishermen (About the old professional fishermen) of Lake Balaton) The reminiscence of an old fisherman, Description of mechanized seining on about the kinds of fresh fish available Lake Balaton (Hungary); description of in the Bosphorus about 50 years ago. the gear and its use. FAO:tl F M SJH:sjh Tezel, R. (1957) 571616 Thacker, D.R. and 571619 Balık Balıkçılık, 5(4):24-7 H. Babcock (1957) Mercan balıkçılıgına dair J. Solar Energy Sci. Eng., 1:37-50 (About The mass culture of algae fishing grounds) An amateur fisherman's reminiscence of Review of growth and culture of Chlorella and other algae in mineral media for fishing grounds in the Marmara Sea. commercial purposes. F M GLK:sjh SJH:sjh Tezel, R. (1957) 571617 Thailand. Department of 571620 Balık Balıkçılık, 5(7):25-8 Fisheries (1957) Balıkçılık anane ve adabına dair Bangkok, 52 p. A general account on the fisheries of (About the habits and customs among the Bosphorus fishermen) Thailand An old amateur fisherman's reminiscences about the traditions and the mutual respect of the Bosphorus fishermen some 50 years ago. MF SJH:sjh M

Thailand. Ministry of 571621.

Agriculture (1957)

Bangkok, 263 p.

Agriculture in Thailand

Thomson, J.M. (1957) 571624

<u>Aust.J.Mar.Froshw.Ros.</u>, 8:1-13

Biological studies of economic significance of the yellow-eye mullet,
<u>Aldrichetta forsteri</u> (Cuvier and Valenciennes) (Mugilidae)

Chapter 3 deals with aquatic resources and fisheries; species caught are listed; fishing, processing and marketing methods are described; governmental activities are described; statistics of gear, craft, catch, market handlings, and trade.

Range and distribution; form and growth; size distribution; maturity; fecundity; sex-ration; food; movoments, variation; implications for the commercial fishery.

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Théodoridés, J. (1957) 571622
Vie et Milieu, 8(1):115-6
Parasites intestinaux de Hydrophilus
(Hydrous) pistaceus Lap. (Col. Hydrophilidae) observés à Banyuls
(Intestinal parasites of Hydrophilus
(Hydrous) pistaceus Lap. (Col. Hydrophilus)
(Banyuls) observed at Banyuls)

Thomson, J.M. (1957) 571625

<u>Aust.J.Mar.Freshw.Res.</u>, 8:14-28

Interpretation of the scales of the yellow-eye mullet, <u>Aldrichetta forsteri</u> (Cuvier and Valenciennes)

Trichella hydrophilorum Lógor and Duboscq, Nyctotherus gyocryanus (Claparède and Lachmann) and Toddinoma hydrophili (Galeb) found to be existing in the posterior intestine of H. (H.) pistaceus.

Study of structure; age-length keys; causes of rings and breaks in growth; comparison of growth of fish in Tasmania, Victoria and Western Australia and of females and males; modes of length distribution give high values for years I and II, because of mesh selection.

FAO: efa

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Thompson, P.E. (1957)
Washington

571623

Should areas be set aside as nursery grounds to aid in the annual crop?

Tibbo, S.N. (1957) 571626

<u>Bull.Fish.Res.Bd Can.</u>, (111):139-51

Contribution to the biology of herring
(<u>Clupoa harengus L.</u>) on the Atlantic
coast of Nova Scotia

A general study is made of the length and age composition, rate of growth, sex, maturity and mean vertebral counts of herring on the Atlantic coast of Nova Scotia.

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FAO:glk

Tibbo, S.N. (1957)571627 Bull.Fish.Res.Bd Can., (111):85-102 Horring of the Chaleur Bay area

Lengths, age, sex and maturity, vertebral counts; length and age composition; variations in relative strength of yearclasses; rates of growth; the herring fishery and its potential.

Tiews, K. (1957) Ber.dtsch.Komm.Mocresforsch., 14(3):221-

Wirtschaftliche Bedeutung der deutschen (Economic importance Thunfischorei of the German tuna fishery)

The fishing areas and seasons, fleet and landing harbours; catches in various years and processing.

FAO:glk

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Tibbo. S.N. (1957) 571628 Bull.Fish.Res.Bd Can., (111):153-64 Herring populations on the south and west coasts of Newfoundland

Length and age composition, variations in relative strength of year-classes, rates of growth, sex and maturity, vertebral counts.

Timofecva-Resovskaya, E.A. (1957) 571631 Bull.Soc.Nat.Moscou, 62(1):37-41 Biological deactivation of water containing radioactive substances by means of special ponds

FAO:glk

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571632

Tiews, K. (1957) 571629 Bor.dtsch.Komm.Mooresforsch., 14(3): 192-220

Biologische Untersuchungen am roten Thun (Thunnus thynnus, Linnacus) in dor Nordsee (Biological investigations on the red tunas (Thunnus thynnus) in the North Sea)

Investigations concerning the appearance, propagation, length and weight and origin of Thunnus thynnus in the North Sea.

FAO: tl

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Ting, R.Y. and P.T. Macy (Ed.) (1957) Transl.Ser.Pacif.Salm.Invest., (13), 4 p. Discussion on the position from which

scale samples of red salmon should be takon for age determination

Translated from Biol.Rep.int.N.Pacif. Fish.Comm., 14.

MF

Thacheva, K.S. (1957) 571633

Vop.Ikhtiol.,.8:51-4

Racomoshenic krupnoi stavridy (Trachurus trachurus L.) v Chornom more
(Reproduction of the Longo mackerel (Trachurus trachurus L.) in the Black Sea)

Brief account of the distribution of spawning fish, eggs and larvae.

Tortonese, E. (1957) 571636

<u>Bull.Res.Coun.Israel</u>, 6B(3-4):189-92

On the Johnnoderm fauna of Haife Bay

Littoral and Mediterranean forms, living in sand or mud; names and characters of 24 spp. listed, five of which were previously unknown on this coast.

FAO:glk

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IVI

Tomlinson, N. and 571634
R.A. MacLeod (1957)
Canad.J.Microbiol., 3(4):627-38
Nutrition and metabolism of marine bacteria. IV. The participation of Na, K', and Mg' salts on the oxidation of exogenous substrates by a marine bacterium

The inorganic ion requirements for the preparation, storage, and oxidative activity toward exogenous substrates of washed cell suspensions of a marine bacterium have been investigated.

Towlson, G. (1957) 571637

New Scient., 2(46):14-6

Influences on the regime of rivers

A review of the natural factors which determine the characteristics of a river system, and the study of which is the basis of river control engineering.

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Toner, E.D. (1957) 571635

Paper presented at the Symposium of the British Association meeting in Dublin, Sect. D (Zool.), 10/9/57

Movements of salmon in the sea around Ireland

Tozawa, H., Y. Tokue 571638
and K. Amano (1957)
Bull.Jap.Soc.sci.Fish., 23(6):335-41
Studies on the radioactivity in certain polagic fish - V. Confirmation and determination of radioactive elements in contaminated fishes caught in 1956 (Part 1)

Analysis of liver of yellow-fin tuna and muscle of big-eye tuna caught by SHUNKOTSU- MARU, June 1956, at 10°N, 157°30'E, with special attention to presence of Fe55, Zn65, and Cd113m.

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Trager, W. (1957) 571639

<u>Biol.Bull., Wood's Hole</u>, 112(1):132-6

<u>Excystation of apostome ciliates in relation to molting of their crustacean hosts</u>

Observations and experiments have been made with the encysted phoronts of Gymnodinioides inkystans on the gills of Pagurus longicarpus and of Gymnodinioides sp. on the gills of Uca pugnax and examines the condition under which excystation will take place.

Tsuda, K., S. Akagi and 571642
Y. Kishida (1957)
Science, 126:927
Discovery of cholesterol in some red algae

Technique of extraction, purification and identification applied to <u>Rhodoglossum</u> pulcherum (Kützing) and members of the family Gelidiceae.

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Trewavas, E. (1957) Copeia, (2):161-2 571640

Exploration hydrobiologique du Lac Tanganyika (1946-1947) (Hydrobiological survey of Lake Tanganyika)

Review of Poissons Cichlidae by M. Poll, Rés.sci., 3(5B), 1956:1-619.

Tubb, J.A. (1957) 571643 Occ. Pap. IPFC, mimeo: 4 p.

Shifting cultivation and inland fisheries

Discusses adverse effects on water regime in sloping and flat lands subject to flash floods and silting resulting especially from too frequently repeated shifting cultivation.

HR:efa

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571644

Truesdale, G.A. and 571641
A.L.H. Gameson (1957)
J.Cons.int.Explor.Mer., 22(2):163-6
The solubility of oxygen in saline water

Synopsis for determinations of the solubility of oxygen in sea water at low temperatures have been made; the results confirm the accuracy at such temperatures of a solubility formula previously reported. A table of solubilities in sea water is given, and the uses and limitations of some solubility formulae are discussed.

Tully, J.P. and A.J. Dodimead (1957) J.Fish.Res.Bd Can., 14(3):241-319

Properties of the water in the Strait of Georgia, British Columbia, and influencing factors

The temperature, salinity, pH, and concentrations of dissolved oxygen, dissolved nitrates, nitrites, inorganic phosphates, and silicates are shown and discussed, and their seasonal and diurnal cycles are related to the mechanism of tidal exchange, discharge of the Fraser river, weather, and growth of plankton.

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GLK: tl

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Tunison, A.V. (1957) 571645 Progr.Fish Cult., 19(2):51-7 Esthods for determining the efficiency of production in the trout hatchery	Balik Balikçilik, 5(6):9-14
A review of methods used in analysis and presentation of results.	An article concerning new data based on the results of a research made at the Hydrobiological Research Institute.
WAD: wad F	SJH: sjh M
Turekian, K.K. (1957) 571646 Paper presented at the Thirty-Eighth Annual Meeting, Washington, D.C., April 29 - May 2, 1957 The significance of variations in the strontium content of deep-sea cores	Tuzet, O. and A.M. del Perruggia (1957) Vie et Milieu, 8(1):72-5 Présence de la planaire américaine Dugesia (cuplanaria) tigrina Girard aux environs de Montpellier (The presence of the American planaria Dugesia (cuplanaria) tigrina Girard in the surroundings of Montpellier) Records of distribution of the species.
N	FAO:hr F
Turgutcan, B. (1957) 57164' Belik Balikcilik, 5(10):19 Dügümler (Bağlar). VI (Fishermen's knots. VI) A feature article dealing with several types of knots useful to fishermen.	Twomey, E. (1957) Paper presented at the Symposium of the British Association meeting in Dublin, Sect.D (Zool.), 10/9/57 The age and growth of Trish salmon
SJH:sjh M	MF

Uda, M. and A. Dairokuno (1957) 571651 Sci. Rep. Whales Res. Inst., Tokyo, (12): 209-24

A study of the relation between the whaling grounds and hydrographic conditions. II. A study of the relation between the whaling grounds off Kinkazan and the boundary of water masses

Brief notes on observed whaling grounds; their distribution and seasonal variation. Incl. information on seasonal; variation of whale catch. Ueyanagi, S. (1957) 571654

Rop.Nankai reg.Fish.Res.Lab., 6:113-24

(Spawning of the albacore in the western Pacific). Ni En

Gonads collected by research vessel since 1949 show season and position of spawning, size of maturity, and fecundity.

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Ueyanagi, S. (1957) 571652

Rop.Nankai reg.Fish.Res.Lab., 6:107-12
(On Kajikia formosana (Hirasala and Nekamura)). Ni En

Ecological and morphological evidence that this sp. is really the young of $\underline{K} \cdot \underline{\text{mitsukurii}}$ (striped marlin).

Ueyanagi, S. (1957) 571655
Rep.Nankai reg.Fish.Res.Lab., 6:91-102
(Young of the black marlin, Eumakaira
nigra Nakamura). Ni En

11 specimens 11.1-75-5 cm long from W. Pacific, S. Pacific and Indian Ocean confirmed as Eumakaira nigra in spite of morphological differences from adults, stomach contents show food is small squid and fish (Istiophorus, Decapterus, etc.) concentrated in W. Pacific in N. Equatorial current area.

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Ucycnagi, S. (1957) 571653

Rog. Nonkai reg. Fish. Ros. Lab., 6:103-6

(Morphological changes occurring through the growth of the black marlin,

Eumanaira nigra Nakamura). Ni En

Morphological changes in growth from 10 to 230 cm (snout length, dorsal fin form, pectoral and ventral fin lengths).

Uganda. Game and Fisheries 571656
Department (1957)
Uganda, 1957, 147 p.
Annual report for the period 1st January,
1955, to 30th June, 1956

Part III mentions progress in fisheries in Albert, George/Edward and Kyoga lake areas with a section on fish farming including aerial stocking of <u>Tilapia</u>. One appendix is on deep water fishing experiments.

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Union Géodésique et Géophysique 571657 Union Géodésique et Géophysique 571660 Internationale (.1957)Internationale (1957)Paris, 36 p. Paris, 117-62 Chronique de l'U.G.G.I. no. 1 (I.U.G.G. Chronique de l'U.G.G.I. no. 4 chronicle) (I.U.G.G. chronicle) Programme of the I.U.G.G. 11th General Notes on the present and future activities Assembly, minutes of the meeting of the of various associations and international Interim Policy Committee, and minutes of organizations associated with the I.U.G.G. the meeting of the Working Group of Oceanography of C.S.A.G.I. TL: tl M. M TL:tl Union Géodésique et Géophysique 571658 Union Géodésique et Géophysique Internationale (1957) Internationale (1957)Paris, 39:83 Paris, 167-208 Chronique de l'U.G.G.I. no. 2 Chronique de l'U.G.G.I. no. 5 (I.U.G.G. chronicle) (I.U.G.G. chronicle) Report of the meeting of Working Group National reports presented at the fourth on Oceanography of C.S.A.G.I. in C.S.A.G.I. Antarctic Conference. Gothenburg, January 1957, with appended memoranda and notes on problems discussed during the meeting. TL: tl M TL:tl M Union Géodésique et Géophysique 571659 U.K. Department of Scientific 571662 Internationale (1957) and Industrial Research (1957) Paris, 87-116 H.M.S.O., London, 80 p. Chronique de l'U.G.G.I. no. 3 Report of the Water Pollution Research (I.U.G.G. chronicle) Board with the report of the Director of Water Pollution Research for the year Statutes and regulations of the I.U.G.G. 1956 Reports progress in Thames estuary survey; study of oxygen balance in surface waters, effect on it of synthetic detergents, evaporation reducers, sewage and foam suppressers; and the effects of pollution on fish. A simple automatic recorder of dissolved 0, is described. 21 publications issued in 1956 are listed. TL: t1 M FAO: tjj MF

U.K. Meteorological 5'
Office (1957)
H.M.S.O., London
Climatological charts of the North
Atlantic, May-October, 1957

571663 U.K. Ministry of Agriculture,
Fisherics and Food (1957)
Fish.Lab., Lowestoft
Fish stock record for 1956

A new mimcographed serial publication giving tables of ago and size compositions of British landings, and catches per unit effort of plaice, sole, whiting, hake and cod.

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U.K. Meteorological 571664
Office (1957)
H.M.S.O., London
Climatological charts of the North
Atlantic, July

U.K. Ministry of Agriculture, 571667
Fisheries and Food (1957)
Lab.Leafl., Lowestoft, (15):4 p.
The baird sledge dredge and its handling

Detailed ill. description of new gear for <u>Pecten</u> fishing, and its operation.

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U.K. Metcorological 571665
Office (1957)
O.W.S.Met.Summ., 10
Meteorological and current summary for
Ocean Weather Stations - India, Juliett,
and Alpha for January to December 1956

U.K. Ministry of Agriculture, 571668
Fisherics and Food (1957)
Lab.Leafl., Lowestoft, (13):5 p.
English fish marking experiments in the near waters in 1956

Numbers and localities of cod, whiting, coalfish, hake, sole and herring marked and recaptured.

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U.K. Ministry of Agriculture, 57166
Fisheries and Food (1957)
Lab.Leafl., Lowestoft, (16):31 p.
Guide to the exhibition, fisheries
laboratory, Lowestoft

A narrative giving detailed explanation of exhibits illustrating and explaining English marine fisheries research. U.K. Ministry of Transport 57167 and Civil Aviation (1957)
London

Manual on the avoidance of pollution of the sea by oil

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(1957)

571673

U.K. Ministry of Agriculture, 571670
Fisheries and Food (1957)
Lab.Leafl., Lowestoft, (12):26 p.
Mid-water trawling pair fishing
experiment on herring 1955-56

An ill. report on alterations to vessels, specification and operation of gear; catches of Clupea harengus obtained: their size and quality dependence on depth and time of day; use of echosounder to observe both fish and gear.

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FAO:wad

crops.

U.S. Congress. Senate

Committee on Interstate and

Wash., U.S.Govt Print.Off., 47 p.

Hearing regarding Senate bill 1952

proposing a program of research to

develop methods for the commercial production of fish on flooded rice

acreage in rotation with rice field

Research for commercial production of

Foreign Commerce

fish on flooded rice acreage

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U.K. Ministry of Agriculture, 571671
Fisheries and Food (1957)
Lab.Leafl., Lowestoft, (14):5 p.
Stocks of hake

A development of analysis reported in Lab.Leafl., (4), 1954, to determine benefits of regulated fishing for Merluccius merluccius.

U.S. Department of the Interior. 571674
Branch of Gamefish and Hatcheries (1957)
Fish.Leafl., Wash., (147):7 p.
List of federal fish-cultural stations

SJH:sjh

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U.S. Fish and Wildlife Service (1957) Dingell-Johnson Quart., 5(3) 571675

For the period 1/1/56-30/6/56 lists and indexes projects and summarizes accomplishments of U.S. Federal Aid in Fish Restoration Program covering investigations of many marine and inland fisheries and species, development, and land and water acquisitions under this program in all states and territories.

U.S. Fish and Wildlife Service 571678
Bureau of Sport Fisherics and
Wildlife (1957)

Sport Fish Rostor., (Statist.Suppl.), 59 p. A report on sport fish restoration

A summary in tabular form of detailed information on the Federal Aid to Fish Restoration (Dingell-Johnson) Program in the U.S. during the 1952-56 period.

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U.S. Fish and Wildlife
Service (1957)
Dingell-Johnson Quart., 6(1)

571676

For the period 1/7/56-31/12/56 lists and indexes projects and summarizes accomplishments of U.S. Federal Aid in Fish Restoration Program covering investigations of many marine and inland fisheries and species, development, and land and water acquisitions under this program in all states and territories.

U.S. Government (1957) 571679 Selected U.S.Govt Publ., Govt Print.

Off., Wash., 760 p.
Documents on the use and control of the waters of interstate and international streams, compacts, treaties, and adjudications

WAD :sjh

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U.S. Fish and Wildlife Service 571677 Bureau of Sport Fisheries and Wildlife (1957) Sport Fish Restor., 29 p.

A report on sport fish restoration

A brochure describing the Federal Aid in Fish Restoration Program (Dingell-Johnson) of the United States for the 1952-56 period; popularly written and with many illustrations.

U.S. Government (1957) 571680. Wash., U.S.Govt Print.Off., 411-43, 464. Arctic bibliography, Volume 7, A-Z, No. 33

WAD: wad

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Washington, 175 p.
Groundfish: fishing and filleting.
Information on the domestic industry, production, consumption, foreign trade, and industries in foreign countries

Includes description of groundfish areas and fishing operations; landings, employment and earnings, craft activity and financing.

orick, n.J., L.C. Phare 571664
and E. Skudrzyk (1957)

Paper presented at the Thirty-Eighth
Annual Meeting, Washington, D.C.,
April 29 - May 2, 1957
A new method for measuring the thermal
microstructure of the sea

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U.S. Treaties and other 571682
International Acts (1957)
Wash., U.S. Govt Print.Off., 6 p.
Sockeye and pink salmon fisheries.
Protocol between the United States of America and Canada, amending Convention of May 26, 1930, signed at Ottawa,
December 28, 1956

Usponskaya, V.I. (1957) 571685

<u>Bull.Soc.Nat.Moscou</u>, 62(1):43-9

Proliminary observations on how to
weaken or eliminate the earthy odour
of river water

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Unoki, S. (1957) 571683

J.met.Scc.Japan, Scr. II, 35(2):78-87

On the ocean waves due to tropical cyclones (2nd paper). Distribution of waves viewed from geometric consideration and typhoon reconnaissance by aircraft

Utah University. Bureau of 571686
Economic and Business Research (1957)
Publ. Utah St. Dep. Fish Game, (7):73 p.
A study of the economic value of fishing and hunting in Utah

II

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Uusitalo, S. (1957) 571637 Geophysica, Helsinki, 5(3) Beobachtungen mit Bezug auf das Meereseis

Beobachtungen mit Bozug auf das Meereseis (Observations relating the sca-ice)

Salinities of ice, its thickness and influence of the snow cover on thickness.

Vaas, K.F. (1957) 571690

Proc.Indo-Pacif.Fish.Counc., 5:90-7

On the nutritional relationships between plankton and fish in Indonesian freshwater ponds

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Uusitalo, S. (1957)
Geophysica, Helsinki, 5(3)
On the interpretation of bathythermogrammes

Description of a method for correction of errors due to the slowness of the instrument.

Valdivia, J.P. (1957) 571691

Bol.Comp.adm.Guano, 33(8):9-13

Situación climática del año 1955

(Climatic situation of the year 1955)

General meteorological study of the climate of the coast of Peru.

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FAO:hr

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Uyguner, B. (1957) 571689

Balık Balıkçılık, 5(2):14-6

Apolyont gölüne ait kısa bir etüt
(A short note on Lake Apolyont)

A survey of the yearly fish production of Lake Apolyont.

Valérien, J. (1957) 571692

Vio et Milieu, 8(1):23-57

L'anhydrase carbonique et la production
des gaz de la vessie natatoire de

Serranus cabrilla (L.) et S. scriba (L.)

(Carbonic anhydrase and the gas production
of the swim bladder of S. cabrilla (L.)
and S. scriba (L.)).

A study of the metabolism of the gases of the swim bladder of the species in relation to the action of the carbonic anhydrase.

SJH:sjh

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Vallowe, H.H. (1957) 571693

Biol.Bull.Wood's Hole, 112(3):422-9

Sexual differentiation in the teleost fish Xiphophorus hellerii, as modified by experimental treatment

The normal sexual development and differentiation of Xiphophorus hellerii have been observed in the light of the adult sex ratio and the differentiation of the gonads from birth to maturity;

reports also attempts to alter the

differentiation pattern by experimental

Van Campen, W.G. and 571696
E.E. Hoven (1957)
Fish Bull., U.S., 111:173-249
Tunas and tuna fisheries of the world.
An annotated bibliography, 1930-53

Lists literature published between 1930 and 1953 with descriptive annotations and a subject index.

FAO:glk

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Valori, P. (1957) 571694
Ric.sci., 27(8):2492-500
La fotometria di fiamma nell'analisi
delle acque naturali (The flame
photometry in the analysis of natural
waters)

Van Drimmelen, D.E. (1957) 571697

<u>Visserij-Nieuws, The Hague</u>, 9(9):138-41

<u>Electrovisserij voor de praktijk</u>
(Electrofishery for the practice)

Reports a method of lithium determination in natural waters by the use of flame photometry. It consists of a particular technique for the preparation of the standards and samples of water to be examined, and permits the extremely quick determination of lithium concentrations up to 0.1ppm.

FAO:glk

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Van Bergeijk, W.A. (1957) 571695 Science, 126:120 Lung volume of amphibian tadpoles

Application of an equation to measure the lung volume of Rana catesbeiana and Xenopus laevis.

Van Gelder, N. and 571698 K.A.C. Elliott (1957) Rev.canad.Biol., 16(4):522 Occlusion and production of factor I by brain slices

Abstr. only. Experiments with crayfish brain extracts which inhibit activity of stretch-receptor neurone.

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J.Cons.int.Explor.Mer., 22(2):174-9
A modification of the Knudson method for salinity determination

A new adsorption indicator method for determining salinity of sea water is described. Experience over a period of twelve menths has shown this method to be more trouble-free than the standard Mohr method.

B.J. Concha (1957)
Invest.zool.chil., 3:88-95
Fisiologia do las glándulas adrenales en el teleosteo Sicyases sanguineus (Physiology of the adrenal glands in the teleostean S. sanguineus)

An investigation of the physiological effects of adrenal ctomy on S. sanguinous.

GLK:sjh

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FiB:hr

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Van Meel, L. (1957) 571700

Bull.Jard.bot.Brux., 27(4):695-702

Biddulphia sinensis R. Greville 1866
Contribution à l'écologie d'une diatomée du plancton marin de la Mer du Nord

(Biddulphia sinensis R. Greville 1866 - 1)

Contribution to the ecology of one diatom of the marine plankton of the North Sea)

Taxonomic description, distribution and abundance and its seasonal variation, 1951-53, annual variation 1921-34.

Vargas, F.F. and B.J. Concha (1957) 571703

Invest.zool.chil., 3:81-7
Histología y tócnica de extirpación de
las glándulas adrenales en el teleosteo
Sicyases sanguineus) (Histology and
methol of extirpation of the adrenal
glands of the teleostean S. sanguineus)

Anatomical and histological study with description of a surgical technique for adrenal ectomy in the species.

FAO:sjh

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Vannucci, M. (1957) 571701 Nature, Lond., 179:326 Double monster ephyrae of Aurelia aurita

Describes two double monsters produced by normal scyphistoma taken from a tank in aquarium of Marine Station at Millport

Vargues, H. (1957) 571704

<u>Bull.sta.Aquic.Pêche Castiglione</u>, (8):
59-71

Etudo sur los organismos nitrificateurs des "Mattes" de Castiglione (Study of nitrificant organisms of "Mattes" of Castiglione)

A chemical study of oozes of "Mattes".

FAO:efa

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FAO: hr

Vargues, H. (1957) 571705

Bull.Soc.Hist.nat.Afr.N., 48(5-6):373-6

Quelques aperçus concernant les phénomènes d'ammonification dans les boucs marines provonant do la baic d'Alger (Somo reviews concerning the phenomena of ammonification on the marine sediments from the Bay of Algier)

Contains mothods and results.

Vedel Taning, A. (1957) 571708

Dansk FiskTid., 75(7):84-5

Danmarks fiskori- og havundersøgelsers

mangeartede virke i året 1956

(Various activities of Denmark's
fisheries and marine investigations
during 1956)

Popular account of the activities (Place investigations, investigations on mesh size, investigations on ganoids and clupeoids).

FAO:hr

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Vasiliu-Suceveanu, N. 571706
and I. Radulescu (1957)
Bul.Inst.Cerc.piscic.Roman., 16(2):87-8
Nota asupra endoparazitului Bunocotyle
cingulata Odhner 1928 la pestii din
Marea Neagra (Note on the endoparasite
Bunocotyle cingulata Odhner 1928 in
Black Sea fishes). Ru Fr

First finding of this trematode in Caspialosa pontica.

Vedel Taning, A. (1957) 571709

Dansk FiskTid., 75(9):109-12

Havundersøgelserne har bl. a. vist, at danske fiskere med flid undgar undermalshvillinger (The sea research has among other things shown that the Danish fishermen purposely avoid too small whitings)

Continuation of 571708.

FAO:sjh

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FAO:tl

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Vasserot, J. (1957) 571707

Vie et Milieu, 8(2):127-72

Contribution à l'étude du comportement de capture des larves de l'odonate

Calopteryx splendens (Contribution to the study of the behaviour during capture of larvae of Odonata Calopteryx splendens)

Describes the material and methods, the behaviour, and experimental analysis of the behaviour during capture.

Veitser, Yu. I. (1957) 571710

Energ, Byull., (5):22-5

Use of water of the Caspian Sea for the regeneration of cation exchangers

FAO:hr

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Velankar, N.K. (1957) 571711

Indian J.Fish., 4(1):208-27

Bacteria isolated from sea-water and marine mud off Mandapam (Gulf of Mannar and Palk Bay)

Lists and describes bacteria isolated during quantitative investigations of bacterial population of sea water, plankton and mud from inshore environment.

FAO:efa

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Venkataraman, G.S. (1957) 571712 <u>Curr.Sci.</u>, 26(8):254 A note on the occurrence of three-pored heterocysts in <u>Mastigocladus laminosus</u> <u>Cohn</u>

Morphological description.

FAO:glk

Verboke, J. (1957) 571713

Résult.sci.Explor.hydrobiol.Kivu, Eduard
and Albort, 3(2):183-203

Chaoboridae (Diptora nomatocera) - Stades immatures et adultes (Chaoboridae (Diptora nomatocera) - Immature and adult stages)

Verbeke, J. (1957) 571714
Résult.sci.Explor.hydrobiol.Kivu, Eduard
and Albort, 3(2):3-24

Le régime alimentaire des poissons du lac Kivu (Congo Belge et Ruanda) et l'exploitation des ressources naturelles du lac (Feeding of fishes in Lake Kivu (Belgian Congo and Ruanda) and exploitation of the natural resources of this soa)

A study in which an evaluation of the principal sources of food in the lake and the utilization of it by the existing fishes leads the author to conclude that certain elements are not being fully utilized and suggests the introduction of

571714 (Card 2)

several species that might utilize it.

Vernet-Cornubert, G. (1957) 571716

Bull.Inst.occanpar.Monaco, (1097): 1-23

Evolution du régénérat de la pince de

Pisa tetraodon (Pennant) en fonction de

la maturité sexuelle (Evolution of

the regenerator of the claw of Pisa

tetracdon (Pennant). in relation to the sexual maturity)

· A study of the morphologic and biometric variations of the claw of females and males, the relation between the molting and reconcration, and the regenerator of the males and females.

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Vernet-Cornubert, G. (1957) 571717
C.R.Acad.Sci., Paris, 244:1085-7
Noto préliminaire sur la transformation de la pince des mâles du crabe oxyrhynque
Pisa tetraodon (Pennant) (Preliminary note on the transformation of chelipeds of the oxyrhynchis crab Pisa tetraodon (Pennant))

Content as per title.

FAO:efa

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Vernon, E.H. and R.G. McMynn (1957) J.Fish.Res.Bd Can., 14(2):203-12 Scale characteristics of yearling chastal cutthroat and steelhead trout

Some scale characteristics of 88 yearling coastal cutthroat trout (Salmo clarki clarki) and 96 yearling steelhoad (Salmo gairdneri) were compared in some detail. Scale counts are compared; relation of circuli number with scale diameter is analysed; scale shape is discussed; relation of scale size and fork length is measured and an adjusted scale size is found. GLK:glk

Vernhet, S. (1957) 571718

Bull.Com.contr.Océanogr., 9(9):500-7

Sur certains phénemènes morphologiques et hydrodynamiques observés sur la côte languedocienne (On some morphological and hydrodynamic phenomena observed on the Longudock coast)

Littoral transfers by migration of submarine dunes. Prodominance of the action of of land breezes on the directions of transfers in the Gulf of Lion and the sinuosities of the beach. Vial, J.L. (1957) 571721 Copeia, (2):143 A new size record for Thampophis marcianus Baird and Girard

Reports record, description and habitat of specimen.

FAO:glk

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Vernon, E.H. (1957) 571719 J.Fish.Res.Bd Can., 14:573-98 Morphometric comparison of three races of kokance (Oncorhynchus nerka) within a large British Columbia lake

An examination of morphometric features, growth rate, vertebral count and secondary sex characters, and a discussion of the effects of environment of anatomical features. A discussion also of the evidence of genetypic divergence resulting from isolation of the rates.

571719 Vibert (1957) 571722

Plaisir de la pôche, Juin-Juill.-Août-Sept.

Races Aménagement des caux douces

Exploitation of fresh waters)

GLK:glk

MF

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Vinokurov, A.A. and E.B. Dubrovskii (1957) Vop.Ikhtiol., 8:191-202

O znachenii nekotorykh ryboiadnykh ptits v rybnom khoziaistve iugo-vostochnogo Priazovia (Concerning the importance of some fish-eating birds in the fish economy of the south-eastern Azov)

On numbers and distribution, nutrition and the relative importance of various fish and insects in the diet of different species of birds and on the part played by birds in the spread of fish diseases and parasites.

FAO:glk

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FAO:hr

running ones)

France.

Vivier, P. (1957)

Bull.franc.Piscic., 29:129-35

La protection des eaux contre la pollu-

A report on pollution work conducted in

tion on France (The protection of

waters against pollution in France)

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Virginia. Commission of Fisheries (19

(1957)

Division of Division and Printing, Richmond, 61 p.

Fifty-eighth and fifty-ninth annual reports of the Commission of Fisheries of Virginia for the fiscal year ending June 30, 1956 and June 30, 1957

Personnel; expenses and receipts statistics; reports of Superintendent of hatcheries and of Virginia Fisheries Laboratory - spp. studied, public education and graduate instruction, recommendations for research and management list of publications since 1948.

FiB:sjh

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Vladimirov, V.I. (1957) 571727 Zool.Zh., 36(8):1121-4 K biologicheskoi klassifikatsii ryb: prokhodnye i poluprokhodnye (On the biological classification of fishes: through-running and semi-through-

Subclassification of anadromous and catadromous fishes.

FAO:tl

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Vivier, M. (1957) 571725

<u>Bull.franc.Pisc.</u>, 30(187):48-66

Communiqué. Comité scientifique de la Station Centrale d'Hydrobiologie appliquée (Biarritz, 11 mai 1957)
(Communication. Scientific Committee of the Central Station of applied Hydrobiology. (Biarritz, 11 May, 1957))

Reports on the activities of different hydrobiological stations.

Vladykov, V.D. (1957) 571728 Contr.Dop.Fish., Quobec, 54:235-48 Distant receptures of shad (Alosa sapidissima) tagged in Quobec

Tabulation of recoveries; description of tag; account of water temperatures; discussion of recoveries with regard to the evidence they furnish on trend of migration.

FAO:hr

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GLK: glk

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Vladykov, V.D. (1957) 571729 Volkov, V.G. and 571732 Fishes of Quebec, (3) B.V. Shekhvatov (1957) American lobster. Trud. Inst. Okeanol., 24:215 (Acoustical coupled high-speed bathy-Popular brochure with description of the thermograph). species and notes on habitat, length and weight, spawning, food and growth. MF FiB:glk Vladykov, V.D. (1957) 571730 Volpe, A.V. (1957) 571733 Fishes of Quebec, (2):4 p. Pan-Amer. Fisherm., 12(5):10-1 Atlantic salmon. Fingerprinting fish Popular brochure with description of the Popular account of tagging methods; age species and notes on habitat, length and and growth determination; methods of weight, spawning, food and growth. recovery. FiB:glk FAO: sjh MF 571731 Volpe, E.P. (1957) 571734 Volckman, O.B. (1957) Tulane Stud. Zool., 5(9):207-25 Brit.chom.Engng, 2:146-8 The practical application of electrodialysis The early development of Rana capito to the desalting of brackish water sevosa The eggs, tadpoles, and recently metamorphosed forms of Rana capito sevosa from Saint Tammany Parish, Louisiana have been described. The near-identity of the early stages of development of the sp. to the Florida Rana capito sevesa attests to their close affinity.

MF FAO.hr F

Von Bertalanffy, L. (1957) 571735 Handb.Zool., Berl., 8(10):68 p. Wachstum (Growth)

An encyclopedic review of data and theory.

Voskrosenskii, K.A. (1957) 571738

Zool.Zh., 36(2):289-90

Portativnye basseini dlia sodershanila
ryb i bespozvonochnykh (Portable
basins for maintaining fishes and
invertebrates)

Notes on rearing of fish and invertebrates in aquaria under natural conditions.

GLK: sjh

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FAO: tl

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Von Bertalanffy, L. (1957) 571736 Quart.Rev.Biol., 32(3):217-31 Quantitative laws in metabolism and growth

An illustrated review of a technique of evaluating growth data which is applied to fishery studies and in which many of the examples are of fish and other aquatic animals. Tabulates data on relations between metabolic rate and body size.

Voss, G.L. and
C.R. Robins (1957)

Mar.Leb.Univ.Niami, 57-15:11 p. (mimeo)
The Charles F. Johnson Oceanic Gamefish
Investigations - Progress Report No. 3 Summary of investigations for the period
comprising September 1956 through April
1957

Summarizes work under headings:
Systematics; Nomenclature; Distribution;
Growth; Tagging; Migrations; Spawning;
Food; Proposed future work. Bibliography
of papers on billfish and tuna issued
by the laboratory.

FAO:sjh

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SJH:sjh

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Von Scydlitz, H. (1957) 571737 <u>Kurze Mitt.Inst.FischBiol.Univ.Hamburg</u>, (7):40-4 Ein fund von <u>Anarrhichas-larven</u> (A

Ein fund von Anarrhichas-larven (A discovery of Anarrhichas larvae)

Description of larvae obtained by hatching of eggs found on the west coast of Spitzbergen and identified as being Anarchichas lupus. The conditions of hatching are discussed and the features of the specimens are compared with those reported for specimens taken on previous . cccasions.

Vucetic, T. (1957) 571740

Acta adriat., 6:1-52

Zooplankton investigations in the sea
water lakes "Malo Jezero" and "Veliko
Jezero" on the Island of Mljet (19521953)

Description of some environmental conditions, seasonal variations in tlume, in number of organisms and species composition. Ecological notes on most abundant zooplankton organisms.

FAO:glk

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Wachtler, M. (1957) 571741 Waldichuk, M. (1957) Int.hydr.Rev., 34(2):117-20 J. Fish. Ros. Bd Can., 14(3):321-486 Navigation sans compas à l'aide du Physical oceanography of the Strait of radiogoniomètre (Navigation without Georgia, British Columbia compass by means of radiogoniometry) A descriptive and quantitative analysis Description of the method. of the physical eccanography of the FAO:glk GLK: tl Wada, K. (1957) Waldo, E. (1957) Bull.Jap.Soc.sci.Fish., 23(6):302-5 Louisiana Conserv., 9(6):8-9, 23 Laminary structures of cultured pearls The fishery biologist observed with electron microscope -I. Nacreous layer pearl Popularly written articlo describing the work of the fishery biologist with a Illustrated report on sections of special reference to work in Louisiana. Pinctada martensii pearls. SJH: sjh FAO: wad MF Wald, G., P.K. Brown 571743 Walish, H. (1957) 571746 and P.S. Brown (1957) Fish.Bull., Haifa, (11):6-7 Nature, Lond., 180:969-71 · (Fishing in the vicinity of Lake Tiberias Visual pigments and depths of habitat of springs). marine fishes A note. A comparison of rhodopsins in the rods of fishes with specific reference to difference in their wave-lengths at different depths. GLK: wad : SJH:sjh F

Walker, A.M. (1957) 571747 Nature, Lond., 180:228-9 Statistical analysis of a random, moving surface

Roview of 571023.

Wangersky, P.J. and 571750
W.J. Cunningham (1957)
Ecology, 38:136-9
Time lag in prey-predator population models

Analysis of the equations resulting from the introduction of a time lag in the response of the predator to changes in the proy population shows an array of possible solutions. Discusses the determinants of the form of the equation and the possibility of introducing non-linear interactions.

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FAO:glk

Wasserman, A.O. (1957) Copoia, (2):144-5

spadefoot toads

S. hurteri O.

Hybridization in three species of

Brief notes on the development of crosses of Scaphipus couchi + x S. hammondi 0; S. couchi + x

bombifrons O; and S. couchi + x

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571751

Walker, F.T. and 571748
W.D. Richardson (1957)

J.Ecol., 45:225-32

Survey of the Laminariaceae off the
Island of Arran: changes from 1952 to

4 surveys of 1600 ha of sub-littoral in northern half of this Scottish island made in winters 1952-1955 showed seasonal and depth variations, and continuous annual decrease in density of algae, dominated by Lamin.ria saccharina Lamour.

FAO: sjh

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Walters, V. (1957). 571749

Copeia, (1):60-1

Protolophotus, a new genus of allotriognath fish from the Oligocene of Iran

Suggests assignment of fossil form to a separate genus. Incl. diagnosis of Lophotes elami Arambourg and description of the genus. Watabe, N., G. Yoshii 571752 and Y. Okada (1957)

Bull.Jap.Soc.sci.Fish., 23(3):139-43

Studies of shell formation in young pearl oyster, Pinetada martensii (Dunker), using Ca45 - Comparison of the uptake of Ca45 from sea water and feed

Ca⁴⁵ added to filtered an unfiltered (i.e. containing plankton) batches of so. water; eyesters put in after equilibrium established, and later radioactivity of gills and mantle examined.

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New Scient., 2(51):42 18-50 UNG do Colin (1957) 5/1/50 Bull. Inst. franc. Afr. noirc, Sor. A, 19: Rescue at sea 1020-9 The chemical corposition of the bottom Proposed use of underwater sound as deposits from the Sierra Leone River distress signal. ostuary A preliminary statement on the concentration of organic matter in the bottom devosits. FAO: sjh FAO:hr ME Waters, T.F. and 571754 Watts, J.C.D. (1957) 571757 R.C. Ball (1957) Bull.Inst.franc.Afr.noirc, 19:539-47 J.Wildlife Mgmt, 21(4):385-91 The chemical composition of west Lime application to a soft-water, African fish. 1. The west African shad, unproductive lake in northern Michigan Ethmalosa dorsalis (C. and V.) from the Sierra Leone River estuary Four year study showed effect of artificial alkalinity change on plankton Analysis of variation of proximate blooms and on growth of Myriophyllum composition throughout the year. and of stunted Porca flavescens. FAO: sjh FAO:glk MF Watson, K.S. (1957) 571755 ! Waugh, G.D. (1957) Sewage industr. Wastes, 29:901-6 Fish. Invest., Lond., Ser. II, 21(1):1-47 Waste treatment in the atomic age Oyster production in the rivers Crouch anl Reach, Essex from 1950 to 1954 Relation of hydrographic conditions to spatfall; food supply; relation of brooding stock-size to larval production; winter losses; effect of barnacles on set of spat; description of spat collectors and methods of recording spatfall. MF FAO:sjh MF

Waugh, G.D. (1957)

Now Scient., 3(58):10-2

Oysters in Britain

Short illustrated article on the biology: of and fisheries for, Ostrea edulis and Gryphica angulata.

Woise, J.G. (1957) 571762 Ecology, 38:195-204 The spring cave-fish, Chologaster papilliferus, in Illinois

Occurrence, behaviour, temperature telerance, food, reproduction; analysis of rapids community.

FAO: sjh

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FAO:sjh

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Wooks, W.F. and O.S. Loo (1957)

571760

Paper presented at the Thirty-Eighth
Annual Meeting, Washington, D.C.,
April 29 - May 2, 1957
Observations on the growth of sea ice

Observations on the growth of sea ico at Hepedale, Labrador

Woiss, C.W. and 571763
J.L. Botts (1957)
Sowage industr.Wastes, 29:810-8
Factors affecting response of fish to toxic materials

Tests of effect of isopropyl methyl-phosphonofluoridate (Sarin) on Pime-phalos promelas, Lopemis eyanellus and Carassius auratus, and its relation to temperature and O2 content of water.

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Weertman, J. (1957) J.Glaciol., 3:38-42

571761

Deformation of floating ice shelves

Woiss, H.V. and 571764
W.H. Shipman (1957)
Science, 125(3250): 695
Biological concentration by killer
clams of cobalt-60 from radioactive
fallout

Short note on concentration of cobalt by killer clam.

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FAO: tl

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Welnider, A.D. (1957) Wolls, H. J. (1957) Ecology, 38:123-8 Fish. Res. Pap. Wash. Dep. Fish., 2(1):60-6 Rare fishes from the eastern North Abundance of the hard clam Mercenaria mercenaria in rolation to environmental Pacific Ocean factors Ill. descriptions of trawl-caught specimens of Clidoderma asperrimum Examines the relations of this clam (T. and S.), Anotopterus pharao with bottom type, current, vegetation Zugmayer, and Caristius macropus temperature, salinity, depth of water (Bellotti). and fishing pressures. FAO:sjh M FAO:sjh Welander, P. (1957) 571766 Went, A.E.J. (1957) Irish Nat.J., 12:177-82 Tellus, 9:45-52 Wind action on a shallow sea: some The pike in Ireland generalizations of Ekman's theory Summarizes the evidence for the pike The theory has been extended to a having been introduced in Ireland shallow sea, for which the Ekman "depth during the Middle Ages and spread over of frictional influence" d is comparable the country especially during the past to the actual depth h. It is pointed out two hundred years. that the wind-stress divergence may be of the same importance as the windstress curl in this case. FAO:glk :jae

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Welle-Strand, E. (1957) 571767 Dansk FiskTid, 75(2):15 Norsk havforsknings naeste storopgave vil blive smasildsundersøgelser (Next task for the Norwegian oceanographical investigation will be the investigation of small (juvenile) herring)

Plans for the future works on herring investigations in Norway.

Went, A.E.J. (1957) 571770 Nature, Lond., 180:789-90 Biology of the salmon

A report on a symposium by this name held 10 Sept. 1957 by Section D (Zoology) of the British Association meeting in Dublin, which discusses the following papers: 571574, 571635, 571650 and 571771.

FAO:tl

GLK:wad

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(1957)Wont, A.E.J. Wesenberg-Lund, E. (1957) Paper presented at the Symposium of the Bull. Sca Fish. Res. Sta., Israel, (14): 14p. British Association meeting in Dublin, Contributions to the knowledge of the Soct.D (Zool.) 10/9/57 Red Sea - No. 3 - Sipunculoidea and Salmon investigations in Ireland, with Echiuroidea from the Red Sea particular reference to the River Shannon Description and figures of specimens, with notes-on distribution and general biology. Bibliography and table of comparative distributions. MF SJH: sjh M Went, A.E.J. and 571772 Wharton, J. (1957) 571775 E. Twomoy (1957) Irish Nat.J., 12:205-6 Swom, Earl Gregg, Williamsburg, Virginia, 78 p. Notos on Irish char, Salvelinus colii The bounty of the Chesapeake; fishing Gunther: VI. in colonial Virginia Notes on char from Loughs Corrib and Fad, with descriptions and measurements. MF F :jae Wesenberg-Lund, E. (1957) Whoatland, A.B. (1957) 571773 571776 Bull.Ros.Coun.Israel, 6B(3-4):193-200 Challenger Soc., 3(9):31 The Thangs estuary and its pollution -Sipunculoidea from the coast of Israel II. Oxidation and reduction processes Illustrated description of Phascelesoma granulatus, Aspidosiphon mülleri and Abstr. of paper read at Joint Meeting Assidosiphon clegans. of the Water Pollution Research

Laboratory, Stevenage; and Zoological Society of London, Regent's Park, London. 24th and 25th January, 1957. Content as per title.

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571783 i Whitney, G.G., Jr. (1957) J. Cons. int. Explor. Mor., 22(2): 167-73 Factors affecting the accuracy of

thornometric depth determinations

The technique of thermometric depth determination is briefly described, with comments on design factors affecting the magnitude of the pressure factor Q. The technique of laboratory tests of pressure factor determination is briefly; described.

GLK: sjh

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FAO: tl

coast

Wiegel, R.L. and

J. Kukk

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Whittingham, C.P. and 571784 A.H. Brown (1957) Plant Physiol., 32 (Suppl.):xv Oxygon evolution from algae illuminated by short and long flashes

Abstr. of paper presented at the meeting of the American Society of Plant Physiologists and the Physiological Section Botanical Society of America, Stanford, California, August 25-29, 1957 Wiegel, R.L. et al. (1957) Toch.Rep. Calif. Waves Res. Lab., Ser. 99,

(1957) Trans. Amer.geophys. Un., 38(5):667-74

Wave measurements along the California

The heights and periods of waves were

between July 1953 and November 1954,

with similar published data obtained

wave gage. Certain results are compared

measured at Davenport, California,

mostly by muans of a surface-type

by bottom prossure recorders.

Water gravity waves generated by a moving low pressure area

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571785 Wilgel, R.L. (1957) Trans. Amer. geophys. Un., 38(5):760 Discussion of "Properties of shealing waves by theory and experiment"

Discussion on original article by P.S. 1. 1.son, Trans. Amor. geophys. Un., 37: 115-72 (1956), on the Stokes' third approximation for wave colority in relatively shallow water.

Wilder, D.G. and 571788 D.W. McLoese (1957) Progr.Rep.Atl.Cst Stas, (66):24-6 How temperature and crowding affect the holding of lobsters in artificial sea water. Fr

Experiments on mortality of Homarus amoricanus in tanks.

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Wilke, F. (1957) 571789

J.Wildlife Mgmt, 21:241-2

Food of sea otters and harbor seals at

Amchitka Island

Stomach contents analysis of Enhydra have and Phoca vituling richardi.

Williams, A.J. and 577
D.E. Cartwright (1957)
Trans Amer. eophys. Un., 38(6):864-6
A note on the spectra of wind waves

Attention is drawn to a useful non-dimensional parameter which allows the width of the energy spectrum of waves to be taken into account in predicting some of their statistical properties. This parameter is evaluated for the spectra of wind generated waves proposed by Darbyshire and by Neumann.

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TL:tl

Wilte, F. and 571790 K.W. Kenyon (1957) J.Wildlife Mgmt, 21:237-8 The food of fur seals in the eastern Bering Sea

Analysis of stomach contents of samples of <u>Callorhinus ursinus</u> taken in Bering Sea, July 1955.

Wilson, K. (1957) 57179.

Ann.Bot., Lond., 21:1-11

Extension growth in primary cell walls with special reference to Elodea canadensis

Quantitative study of distribution of perforations in walls of cortical parenchyma and discussion of data in relation to general problem of cell extension.

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Willgohs, J.F. (1957) 571791

Nature, Lond., 179:163-4

Occurrence of the leathery turtle in the northern North Sea and off western

Norway

Four records of <u>Dermochelys</u> coriacea (L.) in 1956.

Wilson, M.S. (1957) 571794

Pacif.Sci., 11(3):265-74

Redescription of Teredicola typica C.B.

Wilson (Crustacea: Copepoda)

A review and amplified description with ill. of all the appendages.

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Wimber, P.S. and 571795 (1957)E.D. Avari J.Beng.nat.Hist.Soc., 29:33-6 General information on fishing in North Bengal

Witmer, T.R. (Ed.) (1957) U.S. Department of the Interior, 760 p. Documents on the use and control of the waters of interstate and international streams. Compacts, treaties and adjudications.

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Series of experiments show that Etheostoma blennioides selects algae or other similar plants for egg deposition mainly on the basis of texture and not of smell or colour. Estheostoma caeruleum and E. spectabile have a slight difference in size of gravel utilized for deposition of eggs.

Woelke, C.E. (1957) Fish.Res.Pap.Wash.Dep.Fish., 2(1):35-42 The quality of seed oysters from Japan

Nine years of records of Crassostrea gigas before export from Japan to Washington including estimates of predator mortality.

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Winn, H.E. (1957) : <u>Science</u>, 125:885-6

Behaviour, sexual dichromatism, and species Blue-sac disease investigations: microof parrot fishes

; Wolf, K. (1957) Progr.Fish Cult., 19(1):14-8 biology and laboratory induction

Pronounced sexual dimorphism among species A review of the previous work, account of of parrot fishes (Scaridae) caused recognition of specific status to males and females of the same species. By studying spawning aggregations, injecting testesterones into females and comparing morphometric characteristics, a number of different species were found to be 'different sexes of the same form.

inew experiments, and a theory that the disease is a result of metabolic wastes; recommendations for control are given.

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Wolf, K. and C.E. Dunbar (1957) Bact.Proc., Abstr., (A57):25 Strain differences in a fish-pat Corynebacterium	571801 Shogenic	Wood, E.M. and W.T. Yasutake (1957) Progr.Fish Cult., 19(2):64-7 Acute sulfamethazine toxicity salmon Describes its pathology and difactors in ctiology of losses treated with sulfonamides, with reference to Oncorhynchus.	scusses among fish
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Wolfs, J. (1957) Résult.sci.Explor.hydrobiol.Kivu and Albert, 3(2):171-82 (Culicidae (Diptera nematocera))	,	Wood, E.M. and W.T. Yasutake (1957) Progr.Fish Cult., 19(1):7-13 Histopathology of fish: V. Gil Reviews the controversy concer presumed causative agents (back infectional nutritional deficit this important disease and intense evidence which advances th that both infectious and nutri agents are operative simultane	rning eterial lency) of croduces ne theory
	F'	WAD: wad	F
Wollcott, W.S. (1957) Copeia, (1):1-10 Comparative osteology of serrand of the genus Roccus (Mitchill) A comparative osteological study Roccus saxatilis, R. chrysops, F. canus, R. interruptus, and R. lawhich indicates that biological species are of a single genus. Segmera may be defined by combine skeletal characters.	of amori- brax y the Sub-	Wood, F.G., Jr. (1957) Copeia, (2):153-4 Southern extension of the know of the basking shark, Cetorhin (Gunnerus) Reports record of specimen that known southern range of this s	nus maximus at extends

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skeletal characters.

Wood, P.C. (1957) 571807 J.Cons.int.Explor.Mer., 22(2):200-7 Factors affecting the pollution and selfpurification of molluscan shellfish

A description of the natural processes of pollution and cleansing in oysters (Ostrea edulis) and mussels (Mytilus edulis) in an estuary subject to intermittent pollution. Temperature affects seasonal cycles.

Wordie, J.M. (1957)

Mar.Obs., 27(175):31-3

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Woodburn, K.D. et al. (1957) 571808 Tech.Ser.Fla Bd Conserv., (21):33 p. The live bait shrimp industry of the west coast of Florida Worrell, E. (1957) 571811

Aust.Zool., 12(3):201-10

A new water-monitor from northern

Australia

A description of the new species of lizard <u>Varanus</u> <u>bulliwallah</u>.

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The Woods Hole Oceanographic 571809
Institution (1957)
Coll.Repr.Woods Hole oceanogr.Instn,
32 p.
Report for the year 1956

Lists of trustees, members of corporation and research staff; reports of Director on research (with list of publications) | and of Treasurer.

Worthen, E.P. and F.S. Barbour (1957) U.S.P. 2,759,882

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Yamanaka, H. (1957) 571822 Rep. Nánkái reg. Fish. Res. Lab., 5:158-64 (On the currents in the Solomon Seas from the drift of the tuna long-line between June and August).

Current maps obtained from directions of laying of lines.

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Recruitment, growth and migration data; relation of current systems.

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Report of controlled experiments with cultures.

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Nature of variation is described, and the causes of extreme forms discussed; range of genetic rostral variation is described.

Yanagimachi, R. (1957) 571824 Bull.Jap.Soc.sci.Fish., 23:81-5 sperm-stimulating factor in the micropyle area of the mature egg. Ni

Micrurgical and chemical study of a factor bound to egg-membrane which causes quiescent spermatozoa to become active if brought near it.

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Reports experiments with artificial fertilization under various conditions.

Yashouv, A. (1957) 571828

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The Fish Culture Research Station - Dor (Annual Report for the year 1956)

A review of work and achievements, with short accounts of work done by each staff member.

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Yaphe, W. (1957) 571826 Canad.J.Microbiol., 3(7):987-93 The use of agarase from Pseudomonas atlantica in the identification of agar in marine algae (Rhodophyceae)

An extracellular hydrolase, specific for agar, was prepared from Pseudomonas atlantica.

Yashouv, A. (1957) 571829
Fish.Bull., Haifa, (11):7
(Contribution to the knowledge of Lake
Tiberia carps). Iw

A note.

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Report of a symposium dealing with ageing in bacteria, high plants and animals and in relation to metabolism and other physiological aspects. Includes papers by Sinclair, Comfort and Bourlière, which mention ageing of aquatic organisms (see 570181, 570318 and 571477).

Yashouv, A. (1957) 571830

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(The state of Acanthobrama fishery in Lake Tiborias during 1949-1953). Iw

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Catch and effort statistics of a method of fishing for A. terrae sanctae Steinitz ('Tarith'). Abundance index; catch composition, incl. data for Tilapia spp. Clarias lazera, Varichorinus sp., Barbus canis and B. longiceps.

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Yentsch, C.S. (1957) Nature, Lond., 179:1302-4 571831 i A non extractive method for the quantitative estimation of chlorophyll in algal cultures

Description of the use of millipore filter for measuring of chlorophyll.

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Mortality estimate from length composition and growth rate data for fry of Engraulis japonicus taken in Hyûga Nada at 42 stations in 1950-55.

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Yonge, C.M. (1957) Discovery, 18:255-6 Ncopilina: survival from the palacozoic

Description and significance of new molluscan genus found at depth of 2 miles off West Mexico by GALATHEA, 6/5/52.

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Yokota, T. (1957) 571833 Rep. Nankai reg. Fish. Res. Lab., 5:1-16 (Stock analysis of Sardinops melanosticta (Temminck and Schlogel).

Fishing and natural mortality coefficients calculated for O and I groups, using echo-sounder and purse-seine catches and effort.

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List of marine fishes of Japan.

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Yoshida, K. (1957) 571037 Geophys.Notes, Tokyo, 10(1)

A note on the pressure changes of the two-layer ocean

Young, E.C. (1957) 571840 J.Fm Econ., 39:249-52 Discussion: ten years of F.A.O.

Discussion: ten years of F.A.O. statistics and economics training centers

Discussion of 570500.

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Yoshihara, T. (1957) 571838

<u>Bull.Jap.Soc.sci.Fish.</u>, 22:618-20

(On the type of frequency curve of the catch. II.) <u>Ni</u> En

When the catch is distributed by the exponential distribution, the logarithm of the catch may be represented by a frequency curve which is very close to the logarithmic normal distribution curve.

Yusa, T. (1957) 571841
Bull.Hokkaido reg.Fish.Res.Lab., 15:1-14
Eggs and larvae of flatfishes in the coastal waters of Hokkaido. I. Embryonic development of the starry flounder
Platichthys stellatus (Pallas)

Eggs of fish caught by gill-nets at Hokkaido in March 1954 were artificially fertilized, and the development of the larvae observed. Embryological details are described and illustrated and the relation of development rates of temperature and other factors is discussed.

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J. Fukioka (1957)
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(The toxicity of chemicals on fish. II.
The estimation of the effectiveness of insecticides on the young carp, Cyprinus carpio Linne).

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Experiments on mortality caused by endrin, aldrin, dieldrin, spadrin, rotenone, D.D.T., and B.H.C. Relation to concentration and time of exposure.

Yusa, T. (1957) 571842
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(Eggs and larvae of flatfishes in the coastal vaters of Hokkaido. II. Early development of the flatfish Lepidopsetta mochigarei Snyder). Ni En

Eggs of fish caught by gill-nets at Hokkaido in January 1955 were artificially fertilized, and the development of the larvae observed. Embryological details are described and illustrated and the relation of development rates of temperature and other factors is discussed.

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Zeigler, J.M., W.D. Athearn and H. Small (1957 Deep-Sea Res., 4(4):238-49 Profiles across the Peru-Chile Description of the bottom topogrand notes on the sediments founthe trench.	trench raphy	Zotin, A.I. (1957) C.R.Acad.Sci.U.R.S.S., 115(5): Potreblenie vody iz okruzhaius sredy i obrazovanie polostei u zarodyshei sevriugi (Water from the surrounding medium an formation of cavities in embry Acipenser stellatus)	shchei uptake
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Zhukov, E.V. (1957) Zool.Zh., 36(6):840-6 Novye rody i vidy digenetichesk sosal'shchikov ryb dal'nevostod morei (New genera and special trematodes parasites of fish in Far Eastern seas) Describes two genera and five strematodes parasitizing fishes in the Sea of Japan and in the Kuril shallow waters.	nnykh es of the pp. of dwelling	Zweifel, R.G. (1957) Copeia, (2):78-83 A new frog of the genus Rana f Michoacán, Mexico A taxonomic description of Ran which is compared to the relat neighbouring forms R. montezum R. megapoda.	a <u>dunni</u> ed
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Zobell, C.E. and R.Y. Morita (1957) J.Bact., 73:563-8 Barophilic bacteria in some deep sediments	571851 sea	Anonymous (1957) Progr.Fish Cult., 19(2):75 Acceleration of spawning of advantage Salmon Brief description of effect of using Oncornynchus.	
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Anonymous (1957) Comm.Fish.Rev., 19(2):13-4 Anchovies abundant in southern Cowaters The catch of Engraulis mordax in Californian waters is regulated. The fishing pressure on the stock the species has not yet shown to strenous and the catches have been than the maximum set by regulation	by law. Ls of be en less	Anonymous (1957) Svensk FiskTidskr., 66:26-7 Bergeforsens laxfiske och laxod (Salmon fishery and hatchery at Bergefors) Description of a modern hatcher	t _
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Anonymous (1957) Int.hydr.Rev., 34(2):145-6 Appareil de prise de vues de côte service hydrographique japonais (Apparatus for taking photographic the coast, Japanese hydrographic type) Construction; ill.	s of	Anonymous (1957) Qd Fish., (9):1-5 Biological notes Notes on Psettodes erumei and (auratus.	571859 Chrysophrys
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Clarification of fish names in article on "Fisheries of Black and Marmara Scientific and common names given in

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Anonymous (1957) 571865 Int.hydr.Rev., 34(2):37-42 Correction des sondages par écho

Method employed in USSR of introducing a correction which is the algebraic sum of a correction for error of level and a correction of the ecno, the latter being ande either by calibration or by reference to hydrological data.

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Estimates of the quantities of the various stocks of aquatic organisms available are tabalated, together with statistics of the current average annual catch taken from these stocks by the fishing industries of Canada and other countries.

Anonymous (1957) 571866 Progr. Fish Cult., 19:172-8 The Cortland, New York, Fishery Station: a summary of twenty-five years work

The history, 1930-1957, of this experimental station devoted primarily to studies of trout nutrition.

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Anonymous (1957) Industr.pesq., 31(733):13 Los crustaceos de la costa occafricana (The crustaceans west coast of Africa) Lists the species of economic	of the	Anonymous (1957) Pêche marit., (956):498 La disparition de la morue aux Lofoten (Disappearing of c the Lofoten islands)	od at
with notes on their distributicatch as follows: Palinurus rep. mauretanicus, Fenaeus kerat P. duorarum, Callynectes and M.	on and egius,	Transcript of a conference con the problems of disappearance Gadus callarias from Lofoten I its migrations to the Barents as well as the international implications of the cod fisher those areas.	of s. and Sea,
FAO:hr	M	FAO:hr	M
Anonymous (1957) Qd Fish., 4:5-6 C.S.I.R.O. fish tagging progra	571868	Anonymous (1957) Chron.worla Hlth Org., 11:255- Disposal of radioactive waste	571871 .60
Reports recaptures of 5 sea muone tarwhine in Queensland wat during 1955 and 1956.	,		
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	7.5		16.70
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Reports an undamaged crustace at 13,200 feet depth in Congo marine Canyon and a worm at 10 at Cape Basin (S. Africa) by a trawl worked from R.V. VEMA deprogramme.	Sub- 6,200 feet nylon	Discusses the UN report (ST/WO quotes from it to show the hes of most nations (but not of the take positive measures against pollution.	sitation le UK) to
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Anonymous (1957) 571873: Anonymous (1957) 571876 Comm. Fish. Rev., 19(12):28-9 Progr. Fish Cult., 19:184 Driving herring schools with compressed-Effects of jaw tags and fin-clipping on returns of stocked trout air curtain Briof account of experiments with Comparisons based on stocking description of the gear used. experiments, with Salvelinus fontinalis and Salmo gairdneri. F FAO :ofa M WAD: wad 571877 Anonymous (1957) 571874 Anonymous (1957) Lab.Leafl., Lowestoft, 17:9 p. Progr.Fish Cult., 19(2):67 Echo sounding in East Anglia - It works Effects of jaw tags observed under hatchery conditions Ill. account of location of Clupea harengus, pilchard and horse mackerel. Describes results of an experiment with Types of trace and their variability Salmo gairdneri. and identification. Quantitative echosurveys - how they are conducted and the observations interpreted. Relation of trawling results and echo-survey for cod in Barents Sea. SJH: sjh M WAD: wad F Anonymous (1957) 571878 571875 Anonymous (1957) Comm. Fish. Rev., 19(12):24-5 Penn. Angler, 26(3):12 Effect of dams on lower Susquehanna fish Electric fish shocker at work populations to be studied Pictorial note on apparatus at work. Notes on the objective of the project; biological studies, and effects of dams on young and adult fish. FAO:efa F F GLK: tjj

Anonymous (1957) 571879 Anonymous (1957) 571882 Comm. Fish. Rev., 19(12):71-2 Qd Fish., 4:2-4 Expansion of North Sea fishing operations External anatomy of a bony fish planned Sets out briefly, with aid of rough Russian plans to concentrate more diagram, the characteristics of size attention on North Sea fishing prepared ' and body proportions, fins, head, scales by Baltic Research Institute of and gills. Oceanography. FAC: sjh GLK: sjh MF 571880 Anonymous (1957) Anonymous (1957) 571883 Comm. Fish. Rev., 19(12):22-3 Ijsselmeervisserij, 15 Aug., p. 4 Experimental fishing for red snapper in F.A.O. Raadgevende Commissie voor Gulf of Mexico (M/V SILVER BAY cruise 4) visserij in Europese binnenwateren (F.A.O. Advisory Commission for Gives locations of fishing stations; European Inland Fisheries) specification of gear used, and rate of catch hour. FAU: efa WAD F Anonymous (1957) 571881 571884 Anonymous (1957) Comm. Fish. Rev., 19(12): 29-31 Quart.Bull.S.Pacif.Comm., 7(1):39-42 Exploratory fishing cruise to Alaskan FAC's work in world fisheries waters completed (M/V TORDENSKJOLD cruise 32) Brief account of TORDENSKJOLD cruise 32, with notes on distribution of king crab, bottom fish and shrimp. FAO:efa M MF

Anonymous (1957)
World Fish., Oct.:69-70
Finding fish on the sea bed

Short ill. note on "white line"

technique of distinguishing fish echces, and on a new design of equipment for

571885

Anonymous (1957)
Engineer, London, 204:572-3
Flash evaporator for continuous distillation of sea water

571888

open boats.

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Anonymous (1957) 571886 Chamber's Encyclopaedia World Survey,: 106-10 Fisheries

A review of the history of international cooperation with regard to fisheries especially since World War II, with map of areas served by regional organizations, and table of country membership of these bodies.

Anonymous (1957) 571889 Comm.Fish.Rev., 19(12):74-6

"Flying Saucer" float

New English design of metal trawl float, described and figured.

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Anonymous (1957)
New Scient., 3(57):17
Fishing in New Guinea

Announcement of beginning of operations of 60-foot F.R.V. TAGULA off southern coast of Papua. Programme includes

coast of Papua. Programme includes pilot freezing studies, gear improvement experiments, and demonstration to local fishermen.

Anonymous (1957) 571890 Comm.Fish.Rev., 19(12):27 Haddock tagging and collecting cruise completed (ALBATROSS III cruise 104)

A brief account of ALBATROSS III cruise 104, with notes on and numbers of tagged haddock, cod, halibut and dogfish.

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Anonymous (1957) Anonymous (1957) 571894 Progr. Fish Cult., 19(2):84 Trade News, 10(3):3 Handling minnows in perforated plastic Inspection vessel joins fisheries fleet Entry to service, and program of work Describes use of polyethylene bags for of BELLE BAY. the bait minnows Pimephales promelas and Hyborhynchus notatus for holding and transit. WAD: wad F WADasjh M Anonymous (1957) 571892 Anonymous (1957) 571895 Fish Ind., Moscow, (12):3-5 Discovery, 18(7), 277-8 Usilit' rol' rybokhoziaistvennoi nauki The International Geophysical Year v razvitii rybnoi promyshlennosti (Increasing the role of fishery science A popular account of the purpose, aims in the development of the fishing and programme. industry) MF FLO FAO: tl M Anonymous (1957) 571893 Anonymous (1957) 571896 Africa, Madrid, 14(183):117-8 Trans. Amor. geophys. Un., 38:1016-9

La industria pesquera en Africa Occidental Espanola (The fishing industry in Spanish W. Africa)

IGY Bulletin - Arctic Ocean submarine ridges

Review of the bathymetric features and water circulation in Arctic Ocean as measured from the drifting stations ("icc islands").

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Trans.Amer.geophys.Un., 38:1019 Declietin - Oceanographic is observatory in Iceland Description of the observatory programme, with emphasis on the wave recording problems.	and its	Anonymous (1957) Fish.Inf.Bull., Sept. 13, Law of the sea conference Describes arrangements fo to be held in Geneva, Feb	or U.N. meeting
l'I: tl	M	FAO.sjh	М
Anonymous (1957) 571898 Fish.Inf.Bull., Sept. 27, p. 159 Japanese study of Brazilian fishery resources Report of exploration by R.V. TOKO MARU since December, 1956, for tuna off Rio Grande do Sul and Rio de Janeiro.		Anonymous (1957) 571901 Fish.Inf.Bull., Sept. 27, p. 157 Louisiana Canal's effects on fish and wildlife Reports a letter from U.S. Secretary of the Interior to the Secretary of the Army concerning the possible effect of Mississippi River-Gulf Project in Louisiana on commercial and sport fishery resources.	
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Anonymous (1957) Qd Fish., 4:4-5 Koep an eye on the gannets An account of bird surveys.	571899	Anonymous (1957) Chron.Outre-Mer, 31:54-6 Madagascar; un poisson de (Madagascar; a Lake Itas; Description of an autoch species found in Lake Itas; Ptychochromis betsileanu confused with Paratilaria attempts to transfer this Tananarive have failed, was made to obtain data; habitat and oxygen required.	y fish) thonous fish asy (Madagascar), s may easily be a polleni. As s fish to an investigation regarding its
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Anonymous (1957)
Solo Pâche, 48:5-6
Marquage des maquereaux
Chorol)

571903

(Tagging of

A chart note on tagging of 1500 Scomber scombrus by the research vessel FRESIDENT-THEODORE-TISSIER in 1957 at the west entrance of the English Channel.

Anonymous (1957)
New Scient., 2(48):8-9
A mystery of the sea floor

571906

Feasability of obtaining samples of rock underlying thick sediments at depths of the order of 200 metres and more.

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Anonymous (1957)
Frogr.Fish Cult., 19:192
Maximum - minimum water gauge

Describes an inexpensive and simple gauge to record fluctuations in water level.

Anonymous (1957) 571907

Progr.Fish Cult., 19(1):31

Neutralizing electrostatic charge on rolling-mill scale press

Use of "Staticmasters" (brushes with strips of radioactive polonium) for this purpose on press for plastic impressions of fish scales.

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Anonymous (1957) 571905 Comm.Fish.Rev., 19(12):54-5 Modern trawler to investigate fishery potential of Great Australian Bight

Brief review of the Australian fishery, with notes on the new project of commercial trawling in the Bight.

Anonymous (1957) 571908
Fish.News Lett.Aust., 16(8):5, 27
New prawn ground discovery on first
stage of year's survey

Preliminary announcement of finding Penaeus plebejus, P. esculentus and P. merguiensis in southern Queensland waters near Hervey Bay.

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Comm.Fish.Rev., 19(12):55-7 Now shrimp resource discovered stage of year's survey Gives location of extensive representation of the government chartered of the government chartered completely to fish on the grown	new ground ription of trawler	Anonymous (1957) Keesing's contemp.Arch., 1957-1958, 15501, A. Oceanography - Discovery of 45,000-mile fissure in the world's cean beds: Connexion with world earthquake zone Ill. account of announcement by M. Twing and B. Heezen.				
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Anonymous (1957) Fish.Inf.Bull., Sept. 13, p. Northeastern Pacific albacore Reports completion of survey grounds made by 2 research vo 7 chartered vessels, sponsore U.S. Bureau of Commercial Fig.	of fishing sssels and ed by the	Anchymous (1957) 5719 Rapp.Landbouw-Econ.Inst., 257:31 p. Onserzoek naar de bedrijfsresultaten de garnalenvissorij in 1954 en 1955 (Investigations on the draft results the shrimp fishery in 1954 and 1955) Investigations of the catch on differegrounds and of the economy of the Dute shrimp fishery.	van of .			
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Anonymous (1957) Industr.pesq., (734):14-5 La oceanografía y la pesca (Oceanography and fishery)	571911	Anonymous (1957) 5719 Comm.Fish.Rev., 19(12):22 Otter-trawling and gill-notting survey of eastern Lake Erie (M/V/ CISCO crui Account of survey of fishery resource in the lake with notes on spp. composition of catches and hydrograph conditions at the time of survey.	se 8)			
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Amonymous (1957) 571915 Anonymous (1957) 571918 Fish. News Lett. Aust., 16(12):13 Penn.Angler, 26(1):12-3 PAPUA-N.G. fishery research ship Pennsylvania fishes sciof account of design, equipment, Contains information on range, habita proposed operations and area in which to and characteristics of Minytrema mulae arod. nops, Erimyzon oblongus, Osmerus mordax, Notemigonus crysoleucas, Notropis hudsonius and Notropis atherinoides. GLK: glk M GLK:hr Anonymous (1957) 571916 Anonymous (1957) 571919 Comm. Fish. Rev., 19(12):57-8 Penn. Angler, 26(2):12-3 Pearl-shell operations off Australian Pennsylvania fishes coast by Japanese in 1957 Contains data on distribution and life Brief review of the activities of history, and feeding habits of Pime-Japanese fishermen; conservation measures phales promelas, Rainichthys atratullus, taken, and prohibitions against operating Nocomis biguttatus, Eucalia inconstans, within 10 miles of mainland. Noturus flavus, Notropis cornutus, Chrosomus erythrogaster, Boleosoma nigrum. FAO:efa M GLK: hr F Anonymous (1957) 571917 Anonymous (1957) 571920 Pâche marit., 36:302-3 Lab. Pract., 6:721-6 La pêche du thon en Côte d'Ivoire pH equipment in the laboratory (Tuna fisheries along the Ivory Coast) Notes on the fishery.

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Anonymous (1957) 571921 Anonymous (1957) 571924 Contract.Rec., 68(6-7) Marchés trop. Monde, 13(592): 726-7 La pisciculture s'est considérablement Radioactive probe traces sewage développée en 1956 (Pisciculture expanded considerably in 1956) F MF 571925 Anonymous (1957) 571922 Anonymous (1957) Outdoor Calif., 18(4):1 Progr. Fish Cult., 19:178 Rainbow trout bred in salt water Poll shows hunting, angling spending in state A brief description of Salmo gairdneri culture in a salt-water-farm in Describes methods used in and results of a survey made in California, U.S.A. in Denmark 1955. M WADswad MF WAD: wad Anonymous (1957) 571923 Anonymous (1957) International Pacific Halibut Commission, Comm. Fish. Rev., 19(2):23-5 Preliminary experiments to develop a new Regulation and investigation of the mechanical method for control of oyster Pacific halibut fishery in 1956 drills On the basis of experiments the method of burying the drills (Urosalpinx cinerca) by bottom plowing is recommended. Bottom plowing as a method of drill extermination should be repeated at about two-week intervals to eliminate the drills escaped from the first plowing. M MF FAO:sjh

Anonymous (1957) 571927 Anonymous (1957) 571930 New Scient., 2(48):7-8 Fish.Inf.Bull., Sept. 13, p. 151 The Russians look into space Shrimp in Australia Reports research in progress in USSR on Reports discovery by Government Survey, palatability of algae and derived and beginning of exploitation of grounds products as food for space travel. 6-20 miles off S. Queensland near Fraser and Gt. Sandy Island, in 35 fathoms. FAO: sjh FAO: sjh M Anchymous (1957) 571928 Anonymous (1957) 571931 Qd Fish., (3):3-5 Comm. Fish. Rev., 19(12):23-4 The sand crab (Portunus pelagicus) Shrimp, tuna, and live-bait explorations off Central America (M/V OREGON cruise 46) Notes on the structure, habits, parasites and catches of Portunus polagious. Brief account of exploratory shrimp trawling, tuna fishing and determination of live-bait availability. Incl. locations of stations and figures for catches. GLK: hr FAO :efa Anonymous (1957) 571929 Anonymous (1957) 571932 Comm. Fish. Rev., 19(12):27 Frogr. Fish Calt., 19(1):13 Sea scallop tagging and spawning Simplified transport for smaller numbers observations (M/V ALBATROSS III cruise of salmonids 103) · Describes acration equipment readily Brief account of ALBATROSS III cruise , adaptable to use in passenger automobile 103, with notes on spawning condition using car battery, vibrator converter, of scallops; tagging; underwater piston pump and rubber tube manifold photography, and hydrographic data system. collected. F.O:sfa

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Anonymous (1957) 571933 Anonymous (1957) 571936 Louisiana Conserv., 9:19-20 Science, 126:920 Skin divers wage war on gar! Stagnant dcep-sea trench to be studied Description of reduction of cars by Notes on the programme of research for underwater spearing (skin diving) in ATLANTIS to study a trench in Caribbean Louisiana. Sea. FAO:wad FAO:efa Anonymous (1957) 571934 Anonymous (1957). 571937 Progr. Fish Cult., 19(2):91 Comm. Fish. Rev., 19(12):31-2 Skipjack tuna concourse areas survey Studies on Tilapia in Taiwan completed (JOHN R. MANNING cruise 37) Note on physiological and ecological Account of observations made on the studies. distribution, food and behaviour of the sp. in Hawaiian waters. WAD: wad FAO:efa 571938 571935 Anchymous (1957) Anonymous (1957) Discovery, 18(3):98-9 Comm.Fish.Rev., 19(12):32-3 Sockeye salmon enter Willamette river for Synthetic detergents and foaming in first time sewage Reports run of Onchorhynchus nerka in the river system as a product of fingerlings Review and comment on Ministry of Housing and Local Government. "Report released in adult salmon holding pools of the Committee on Synthetic Detergonts", at Dexter Dam. H.M.S.O., London, 1956.

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Anonymous (1957) 571939 Visão, São Paulo, 13:39, 41 O TOKO-MARU gostou. Nao presisamos de bacalhau (The TOKO-MARU liked it. We do not need cod fish)

Comments on Brazilian fish imports. The "pirarucu" fisheries in the Amazon river. Results of the study made by the Japanese vessel TOKO-MARU to explore the fishery possibilities of the Brazilian coast. Table of quantity (t) and value (Cr\$) of cod fish imports, 1936/56.

Anonymous (1957) Nature, Lond., 179:192 Trigonia: a living fossil

The living species of the family Trigoniidae are placed in the genus Neotrigonia. They all are found along the Australian coast and occur between 10 and 100 fathoms.

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Anonymous (1957) Now Scient., 2(47):11 571940

571943

Trawlers and transom sterns

Briefly describes changes in bow and

stern shape in new British deep-sca trawlers, and their effect on speed. Anonymous (1957) Comm. Fisa. Rev., 19(12):58 Tuna rescurces off Western Australia

Brief notes on occurrence of Neothunnus tonggol, Euthynnus alletteratus, Neothunnus macropterus, Katsuwonus pelamis and Gymnosarda nuda.

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Anonymous (1957)

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Anonymous (1957) New Scient., 3(54):32 571941

Progr. Fish Cult., 19:167 Two modifications of the Secchi disk

Trends and discoveries - Currents and submarine cables

Brief review of 570474.

Describes mothods of attaching rules to disks used in farm-pond studies.

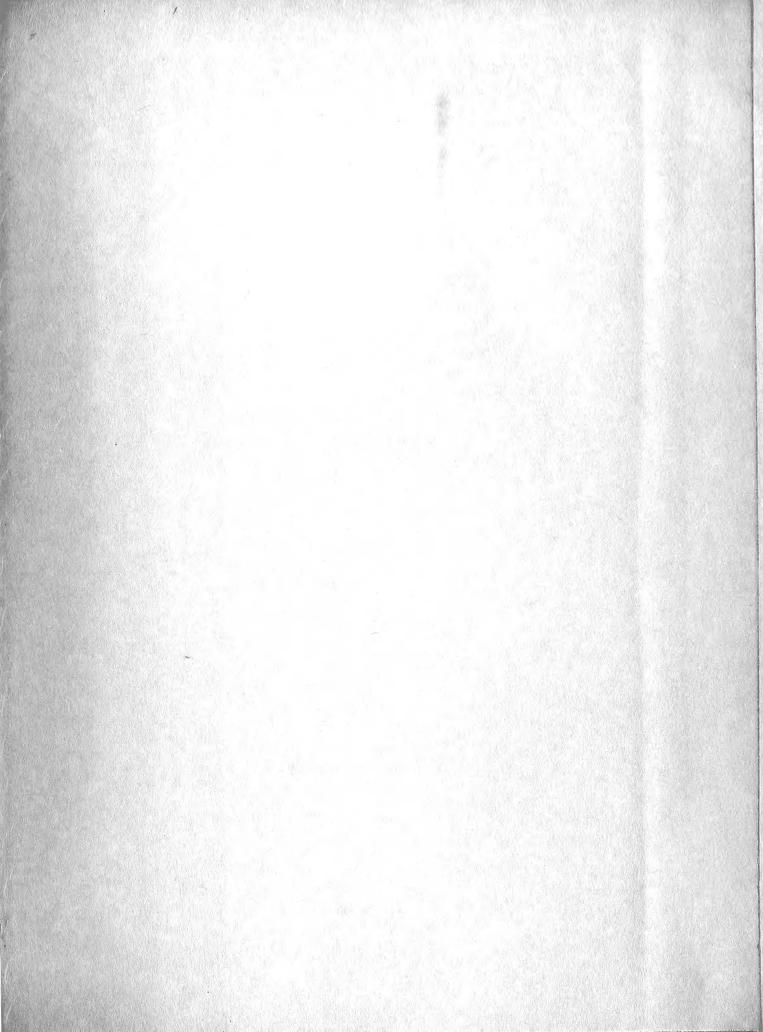
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